Form 3160-3 (August 1999)

### UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED OMB No. 1004-0136 Expires November 30, 2000

5. Lease Serial No.

JTU	-01	119	1-A
-----	-----	-----	-----

6. If Indian, Allottee or Tribe Name APPLICATION FOR PERMIT TO DRILL OR REENTER

7 (1 )				7. If Unit or CA Agreeme	nt Name and No
i. Type of Work: X DRILL	REENTER			UNIT #891008900A	1 /
				8. Lease Name and Well 1	No.
. Type of Well: Oil Well X Gas Well Otho	er Sin	gle Zone	Multiple Zone	NBU 1022-5M-47	
. 1) po or 1/0111				9. API Well No.	10
Name of Operator ERR McGEE OIL & GAS ONSHORE LP				43.047-5	
Address	3b. Phone No. (	include area co	de)	10. Field and Pool, or Exp	
268 SOUTH 1200 FAST VERNAL, UT 84078	(435) 781-7	024		NATURAL BUTTES	10
Location of Well (Report location clearly and in accordance	with any State requir	rements.*)	100140	11. Sec., T., R., M., or Blk	t, and Survey or Area
t surface SWSW 526'FSL, 1079'FWL	(30 /3 1/C			DOOT	
t proposed prod. Zone	44255744	( 16.1	. 448588	SEC. 5, T10S, R22E	13. State
Distance in miles and direction from nearest town or post of	ffice*			12. County or Parish	UTAH
2.8 MILES SOUTHEAST OF OURAY, UTAH			I an or a state	UINTAH	TOTALL
Distance from proposed*	16. No. of Acre	es in lease	17. Spacing Unit of	edicated to this well	
location to nearest property or lease line, ft. 526'			40.00		
(Also to nearest drig. unit line, if any)	1363.21	N41-	20. BLM/BIA Bor	nd No. on file	
Distance from proposed location* to nearest well, drilling, completed,	TO 19. Proposed I	Deptn	BOND NO: W		
applied for, on this lease, ft. TOPO	9070'		BOND NO. W	1-2301	
1. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approxima	ate date work w	ill start*	23. Estimated duration	
1. Elevations (Snow whether DF, KDB, KT, GE, etc.)					
TIT UNGRADED GE	24 Att	achments			
				1.1- Commo	
he following, completed in accordance with the requirements	of Onshore Oil and G	as Order No. 1,	shall be attached to t	ms torm.	
	1	4 Bond to co	over the operations	unless covered by an existing l	oond on file (see
. Well plat certified by a registered surveyor.	Ì	Item 20 at			
A Drilling Plan.			*		
. A Surface Use Plan (if the location is on National Forest Sys		5. Operator c	eruncation.	tion and/or plant or may be re	guired by the
SUPO shall be filed with the appropriate Forest Service Offi				tion and/or plans as may be re	quired by the
		authorized	office.		
of Barelles Vaciliana	Name	(Printed/Typed	<u> </u>	Date	
25. Signa <b>sis</b>		ILA UPCHE			8/10/2006
Mann In was					
DECLI ATORY ANALYST					
REGULATORY ANALYST	Name	(Printed/Typed	<i>l</i> )	Date	TO DO N.
proved by (Signature)	١ .		VG HIII		4-26-CK
Dear the second	¹Office	DEIMULE	ITAL MANAGED		
Title			ITAL MANAGER		
Application approval does not warrant or certify that the application		itable title to th	ose rights in the subi	ect lease which would entitle t	he applicant to conduc
Application approval does not warrant or certify that the applic	ant notos legal of equ	madic inc to th			
operations thereon.					

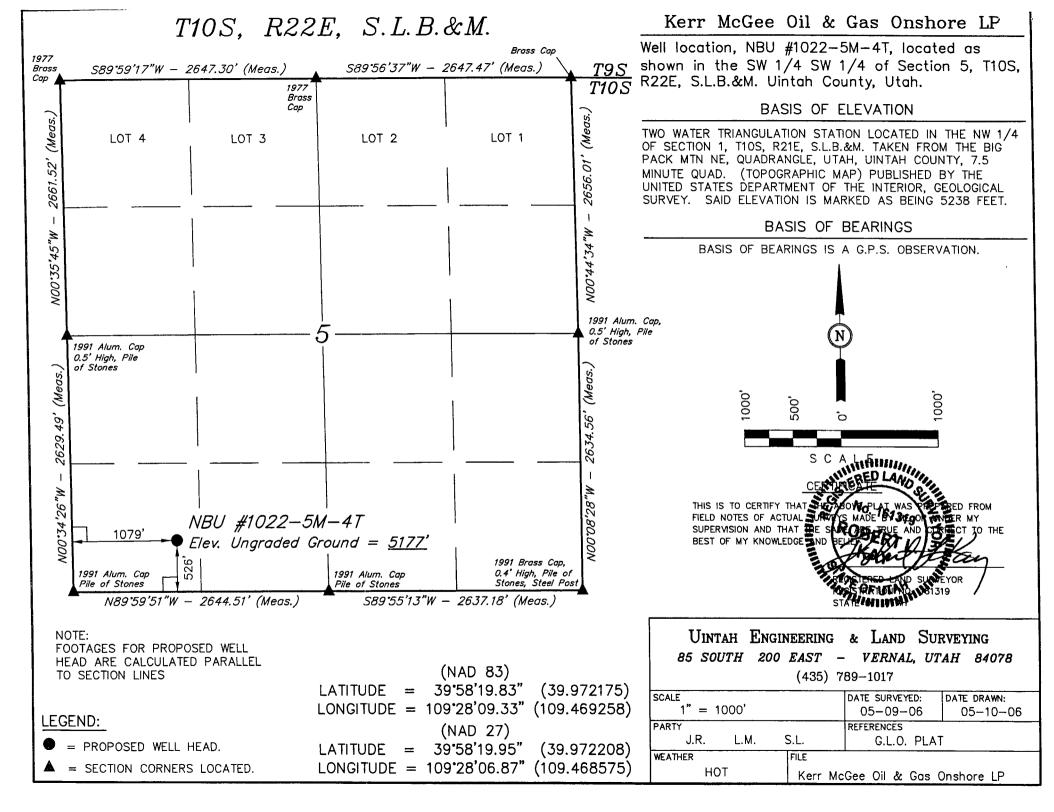
Title 18 U.S.C. Section 1001and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United

States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction. \*(Instructions on reverse)

Conditions of approval, if any, are attached.

Federal Approval of this Action is Necessary

RECEIVED AUG 2 1 2006



### NBU #1022-5M-4T SESWSW SEC 5-T10S-R22E UINTAH COUNTY, UTAH UTU-01191-A

### **ONSHORE ORDER NO. 1**

### DRILLING PROGRAM

### 1. Estimated Tops of Important Geologic Markers:

<u>Formation</u>	<u>Depth</u>
Uinta Green River Top of Birds Nest Water Mahogany Wasatch Mesaverde MVU2 MVL1	0- Surface 1232' 1572' 2202' 4439' 6982' 7919' 8483
TD	9070'

## 2. <u>Estimated Depths of Anticipated Water, Oil, Gas, or Mineral Formations</u>:

Substance	<u>Formation</u>	<u>Depth</u>
Gas Gas Gas Gas Water Other Minerals	Green River Top of Birds Nest Water Mahogany Wasatch Mesaverde MVU2 MVL1 N/A N/A	1232' 1572' 2202' 4439' 6982' 7919' 8483
C WILL THE THE		

## 3. <u>Pressure Control Equipment</u> (Schematic Attached)

Please see the Natural Buttes Unit Standard Operating Procedure (SOP).

## 4. <u>Proposed Casing & Cementing Program:</u>

Please see the Natural Buttes Unit SOP.

### 5. <u>Drilling Fluids Program</u>:

Please see the Natural Buttes Unit SOP.

### 6. <u>Evaluation Program</u>:

Please see the Natural Buttes Unit SOP.

### 7. Abnormal Conditions:

Maximum anticipated bottomhole pressure calculated at 9070' TD, approximately equals 5623 psi (calculated at 0.62 psi/foot).

Maximum anticipated surface pressure equals approximately 3628 psi (bottomhole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot).

### 8. Anticipated Starting Dates:

Drilling is planned to commence immediately upon approval of this application.

### 9. <u>Variances:</u>

Please see Natural Buttes Unit SOP.

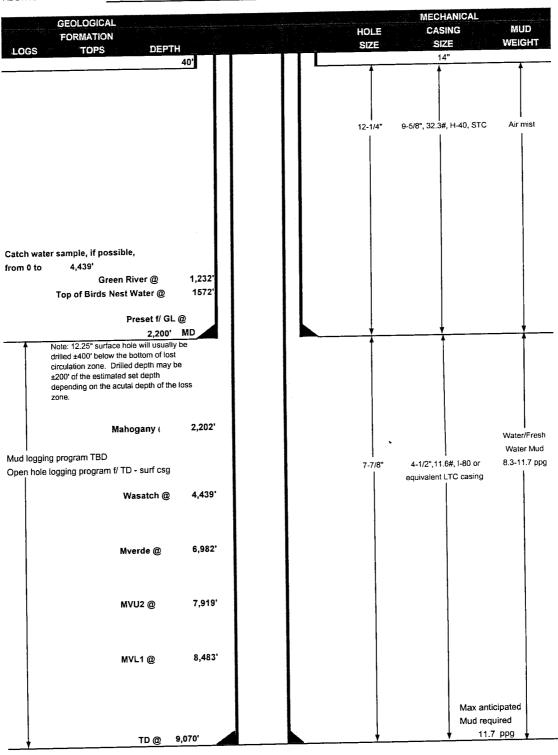
### 10. Other Information:

Please see Natural Buttes Unit SOP.



## KERR-McGEE OIL & GAS ONSHORE LP DRILLING PROGRAM

COMPANY	Z NIAME	KERR-McGEE	OIL & GAS C	NSHORE L	P	DATE	August 1	0, 2006				_
	-	NBU 1022-				TD	9,070'	MD/TVD				_
WELL NAM	-			ntob 9	STATE	Utah	ELEVATION	5,177'	GL	KB	5,192'	
FIELD SURFACE	Natural Butte LOCATION		COUNTY <u>UI</u> SECTION 5, T				-			BHL	Straight Hole	_
00/11/102		Latitude:	39.972175	Longitude		.469258						_
OBJECTIV	/E ZONE(S)	Wasatch/M	esaverde									-
ADDITION		Regulatory	Agencies: BL	M, (SURF 8	MINER	RALS), UDOC	SM, Tri-County	y Health Dept.				_





### KERR-McGEE OIL & GAS ONSHORE LP DRILLING PROGRAM

### CASING PROGRAM

									ESIGN FACTO	JRS
	SIZE	IN	TERV	AL	WT.	GR.	CPLG.	BURST	COLLAPSE	TENSION
CONDUCTOR	14"		0-40'			_		2270	1370	254000
SURFACE	9-5/8"	0	to	2200	32.30	H-40	STC	0.64******* 7780	1.33 6350	4.08 201000
PRODUCTION	4-1/2"	0	to	9070	11.60	I-80	LTC	2.21	1.15	2.19
							<u> </u>			

<sup>1)</sup> Max Anticipated Surf. Press.(MASP) (Surface Casing) = (Pore Pressure at next csg point-(0.22 psi/ft-partial evac gradient x TVD of next csg point)

(Burst Assumptions: TD =

11.7 ppg)

.22 psi/ft = gradient for partially evac wellbore

(Collapse Assumption: Fully Evacuated Casing, Max MW)

(Tension Assumptions: Air Weight of Casing\*Buoy.Fact. of water)

MASP 3523 psi

Burst SF is low but csg is much stronger than formation at 2000'. EMW @ 2000' for 2270# is 21.8 ppg or 1.13 psi/ft

#### CEMENT PROGRAM

	FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE LEAD		Premium cmt + 2% CaCl	215	60%	15.60	1.18
Option 1	ļ :	+ .25 pps flocele				
TOP OUT CMT (1	200	20 gals sodium silicate + Premium cmt	50		15.60	1.18
		+ 2% CaCl + .25 pps flocele	1			
TOP OUT CMT (2	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
SURFACE		NOTE: If well will circulate water to s	urface, op	tion 2 will b		. 1
Option 2 LEAD	1500	Prem cmt + 16% Gel + 10 pps gilsonite	170	35%	11.00	3,82
орион-		+.25 pps Flocele + 3% salt BWOC				1
TAIL	500	Premium cmt + 2% CaCl	180	35%	15.60	1.18
	1	+ .25 pps flocele				
TOP OUT CM	as required	Premium cmt + 2% CaCl	as req.	İ	15.60	1.18
	,					
PRODUCTION LEAD	3,930'	Premium Lite II + 3% KCl + 0.25 pps	430	60%	11.00	3.38
, , , , , , , , , , , , , , , , , , , ,		cellofiake + 5 pps gilsonite + 10% gel				
		+ 0.5% extender				
TAIL	5,140'	50/50 Poz/G + 10% salt + 2% gel	1440	60%	14.30	1.31
	1	+.1% R-3			<u> </u>	

<sup>\*</sup>Substitute caliper hole volume plus 0% excess for LEAD if accurate caliper is obtained

### FLOAT EQUIPMENT & CENTRALIZERS

SURFACÉ	Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe.	
PRODUCTION	Float shoe, 1 jt, float collar. Centralize first 3 joints & every third joint to top of tail cement with bow spring centralizers.	_

#### ADDITIONAL INFORMATION

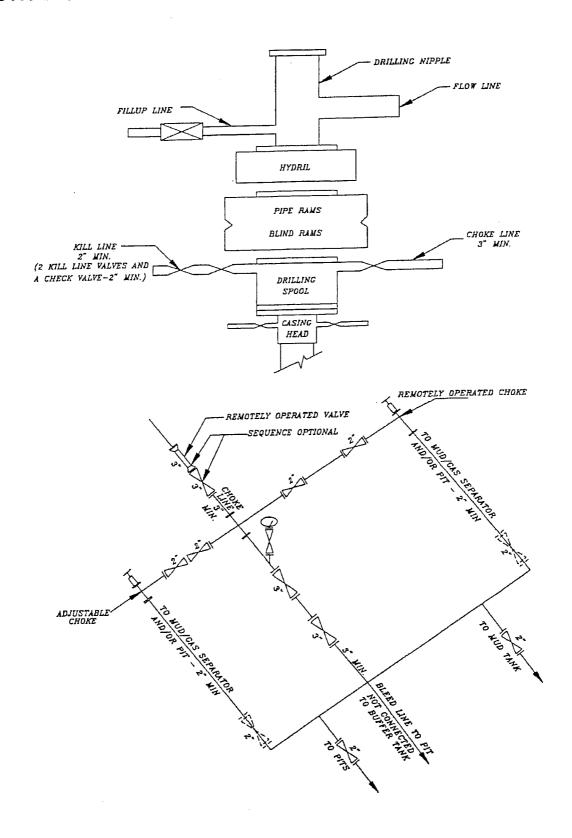
	Test casing head to 750 psi a	fter installing. Test surface casing to 1,500 psi prior to drilling out.
	BOPE: 11" 5M with one annu	lar and 2 rams. Test to 5,000 psi (annular to 2,500 psi) prior to drilling out. Record on chart recorder &
	tour sheet. Function test ram	s on each trip. Maintain safety valve & inside BOP on rig floor at all times. Kelly to be equipped with upper
	& lower kelly valves.	
	Drop Totco surveys every 20	00'. Maximum allowable hole angle is 5 degrees.
	Most rigs have PVT Systems	for mud monitoring. If no PVT is available, visual monitoring will be utilitzed.
	ENONESD.	DATE:
DRILLING	ENGINEER:	Brad Laney
DRII I ING	SUPERINTENDENT:	DATE:
DIVIEDING	<b>44.</b>	

Randy Bayne

<sup>2)</sup> MASP (Prod Casing) = Pore Pressure at TD - (.22 psi/ft-partial evac gradient x TD)

<sup>\*</sup>Substitute caliper hole volume plus 10% excess for TAIL if accurate caliper is obtained

## 5M BOP STACK and CHOKE MANIFOLD SYSTEM



### NBU #1022-5M-4T SESWSW SEC 5-T10S-R22E UINTAH COUNTY, UTAH UTU-01191-A

### **ONSHORE ORDER NO. 1**

## MULTI-POINT SURFACE USE & OPERATIONS PLAN

### 1. Existing Roads:

Refer to the attached location directions.

Refer to Topo Maps A and B for location of access roads within a 2-mile radius.

### 2. Planned Access Roads:

Please see the Natural Buttes Unit Standard Operating Procedure (SOP).

Approximately 0.1 +/- miles of access road is proposed. Please refer to the attached Topo Map B.

### 3. Location of Existing Wells Within a 1-Mile Radius:

Please refer to Topo Map C.

### 4. <u>Location of Existing & Proposed Facilities:</u>

Please see the Natural Buttes Unit SOP.

A 30' of rights-of-way will be required approximately 1150' +/- of 4" pipeline to tie-in to an existing pipeline in Sec. 8, T10S, R22E to cross into Lease #UTU-0466 is proposed. Refer to Topo Map D.

## Variances to Best Management Practices (BMPs) Requested:

The pipeline shall be installed on surface within the access corridor for the well location. As a Best Management Practice (BMP), the pipeline would be buried within the access road corridor if possible. The construction of pipelines requires the corridor of 30 feet.

This exception to the BMP should be granted by the BLM Authorized Officer because indurated bedrock, such as sandstone, is at or within 2 feet of the surface and the soil has a poor history for successful rehabilitation.

All facilities will be painted within six months of installation. Facilities required to comply with the Occupational Safety and Health Act (OSHA) will be excluded. The requested color is Carlsbad Canyon Brown (2.5Y 6/2), a non-reflective earthtone.

### 5. <u>Location and Type of Water Supply:</u>

Please see the Natural Buttes SOP.

### 6. Source of Construction Materials:

Please see the Natural Buttes SOP.

### 7. Methods of Handling Waste Materials:

Please see the Natural Buttes SOP.

Any produced water from the proposed well will be contained in a water tank and will then be hauled by truck to one of the pre-approved disposal sites: RNI, Sec. 5, T9S, R22E, NBU #159, Sec. 35, T9S R21E, Ace Oilfield, Sec. 2, T6S, R20E, MC&MC, Sec. 12, T6S, R19E (Request is in lieu of filing Form 3160-5, after initial production).

### 8. Ancillary Facilities:

Please see the Natural Buttes SOP.

### 9. Well Site Layout: (See Location Layout Diagram)

The attached Location Layout Diagram describes drill pad cross-sections, cuts and fills, and locations of the mud tanks, reserve pit, flare pit, pipe racks, trailer parking, spoil dirt stockpile(s), and surface material stockpile(s).

Please see the attached diagram to describe rig orientation, parking areas, and access roads.

A 20 mil reserve pit liner with felt will be used. As discussed at the on-site inspection.

Location size may change prior to the drilling of the well due to the current rig availability. If the proposed location is not large enough to accommodate the drilling rig. The location will be resurveyed and a form 3160-5 will be submitted.

### 10. Plans for Reclamation of the Surface:

Please see the Natural Buttes SOP.

When the pit is backfilled, the topsoil pile shall be spread on the location up to the rig anchor points. The location will be reshaped to the original contour to the extent possible. The following seed mixture will be used to reclaim the surface for interim reclamation using appropriate reclamation methods. A total of 12 lbs/acre will be used if the seeds are drilled (24 lbs/acre if the seeds are broadcast). The per acre requirements for *drilled* seed are:

Galletta Grass

20 lbs.

Operator shall call the BLM for the seed mixture when final reclamation occurs.

### 11. Surface Ownership:

The well pad and access road are located on lands owned by:

United States of America Bureau of Land Management 170 South 500 East Vernal, UT 84078 (435)781-4400

### 12. Other Information:

A Class III archaeological survey has been performed and completed on July 31, 2006; The archaeological report No. 06-363 is attached. The paleontological survey have been performed and will be filed when received by our office.

This location is not within 460' from the boundary of the Natural Buttes Unit, nor is it within 460' of any non-committed tract lying with the boundaries of the unit.

### 13. <u>Lessee's or Operator's Representative & Certification</u>:

Sheila Ucphego Regulatory Analyst Kerr-McGee Oil & Gas Onshore LP 1368 South 1200 East Vernal, UT 84078 (435) 781-7024 Randy Bayne Drilling Manager Kerr-McGee Oil & Gas Onshore LP 1368 South 1200 East Vernal, UT 84078 (435) 781-7018

Certification: All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved Plan of Operations, and any applicable Notice to Lessees.

Kerr-McGee Oil & Gas Onshore LP is considered to be the operator of the subject well. Kerr-McGee Oil & Gas Onshore LP agrees to be responsible under the terms and conditions of the lease for the operations conducted upon leased lands.

The Operator will be fully responsible for the actions of its subcontractors. A complete copy of the approved "Application for Permit to Drill" will be furnished to the field representative(s) to ensure compliance and shall be on location during all construction and drilling operations.

Bond coverage pursuant to 43 CFR 3104 for lease activities is being provided by BLM Nationwide Bold #WY-2357.

I hereby certify that I, or persons under my supervision, have inspected the proposed drill site and access route, that I am familiar with the conditions that currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed by the Operator, its contractors, and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

Sheila Upchego Bate

## Kerr-McGee Oil & Gas Onshore LP NBU #1022-5M-4T SECTION 5, T10S, R22E, S.L.B.&M.

PROCEED IN A WESTERLY DIRECTION FROM VERNAL, UTAH ALONG U.S. HIGHWAY 40 APPROXIMATELY 14.0 MILES TO THE JUNCTION OF STATE HIGHWAY 88; EXIT LEFT AND PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 17.0 MILES TO OURAY, UTAH; PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 6.9 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHEAST; TURN LEFT AND PROCEED IN A SOUTHEASTERLY, THEN EASTERLY DIRECTION APPROXIMATELY 5.0 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTHWEST; TURN LEFT AND PROCEED IN A NORTHWESTERLY DIRECTION APPROXIMATELY 0.3 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTHEAST; TURN RIGHT AND PROCEED IN A NORTHEASTERLY DIRECTION APPROXIMATELY 3.9 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTHEAST; PROCEED IN A NORTHEASTERLY DIRECTION APPROXIMATELY 0.9 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHWEST; TURN RIGHT AND PROCEED IN A SOUTHWESTERLY, THEN SOUTHEASTERLY DIRECTION APPROXIMATELY 5.8 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTHTHEAST; NORTHEASTERLY Α PROCEED IN **AND** TURN LEFT APPROXIMATELY 0.1 MILES TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 53.8 MILES.

## Kerr-McGee Oil & Gas Onshore LP

NBU #1022-5M-4T LOCATED IN UINTAH COUNTY, UTAH SECTION 5, T10S, R22E, S.L.B.&M.

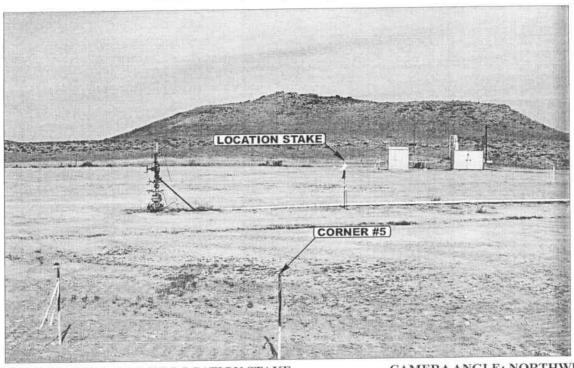


PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKE

CAMERA ANGLE: NORTHWESTERLY

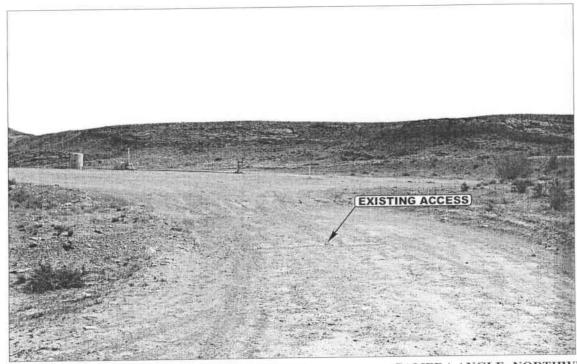


PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS

CAMERA ANGLE: NORTHWESTERLY



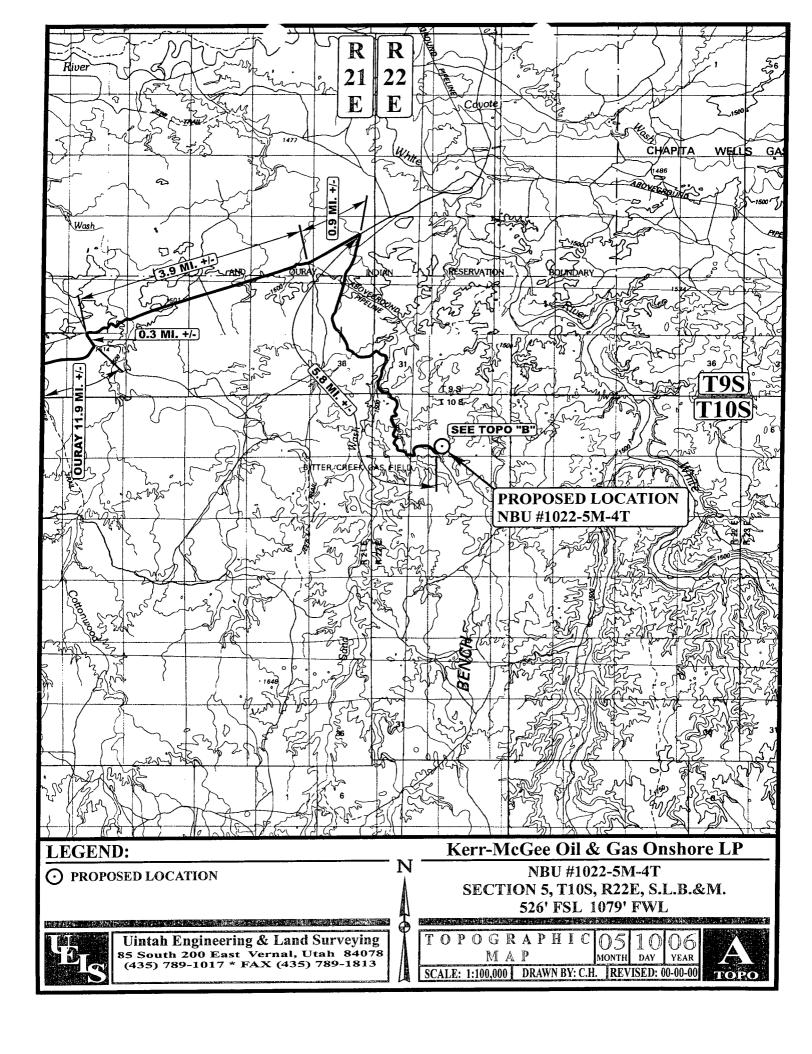
Uintah Engineering & Land Surveying 85 South 200 East Vernal, Utah 84078 435-789-1017 uels@uelsinc.com

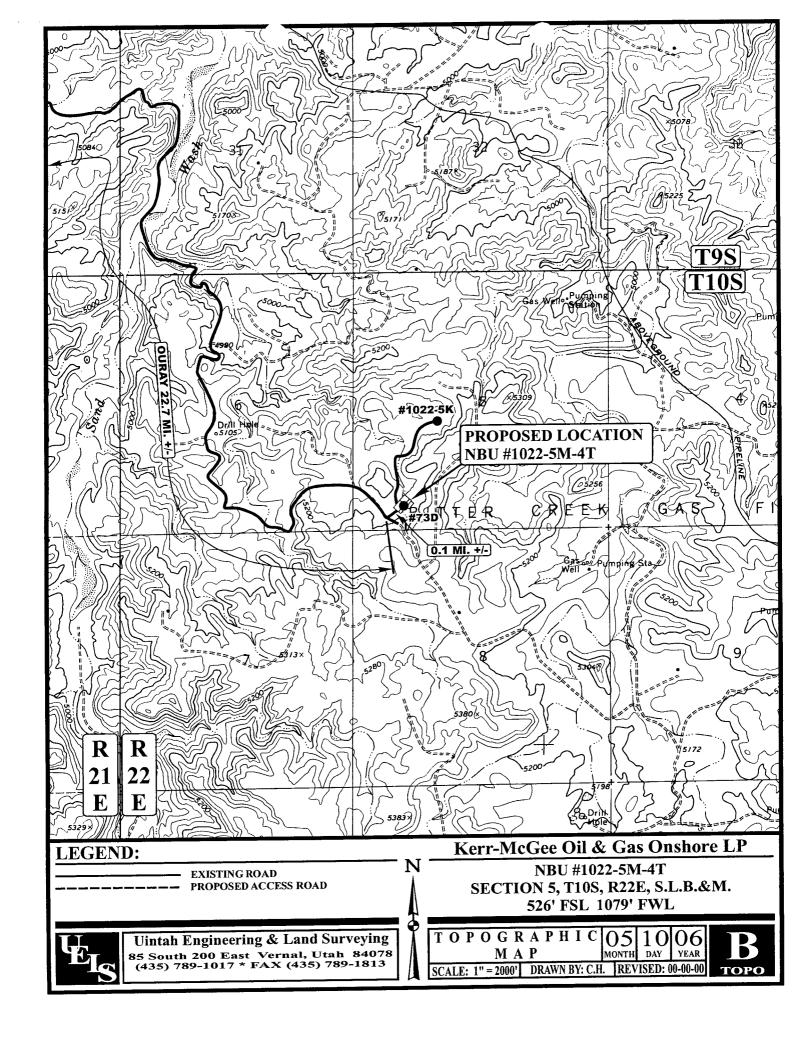
LOCATION PHOTOS

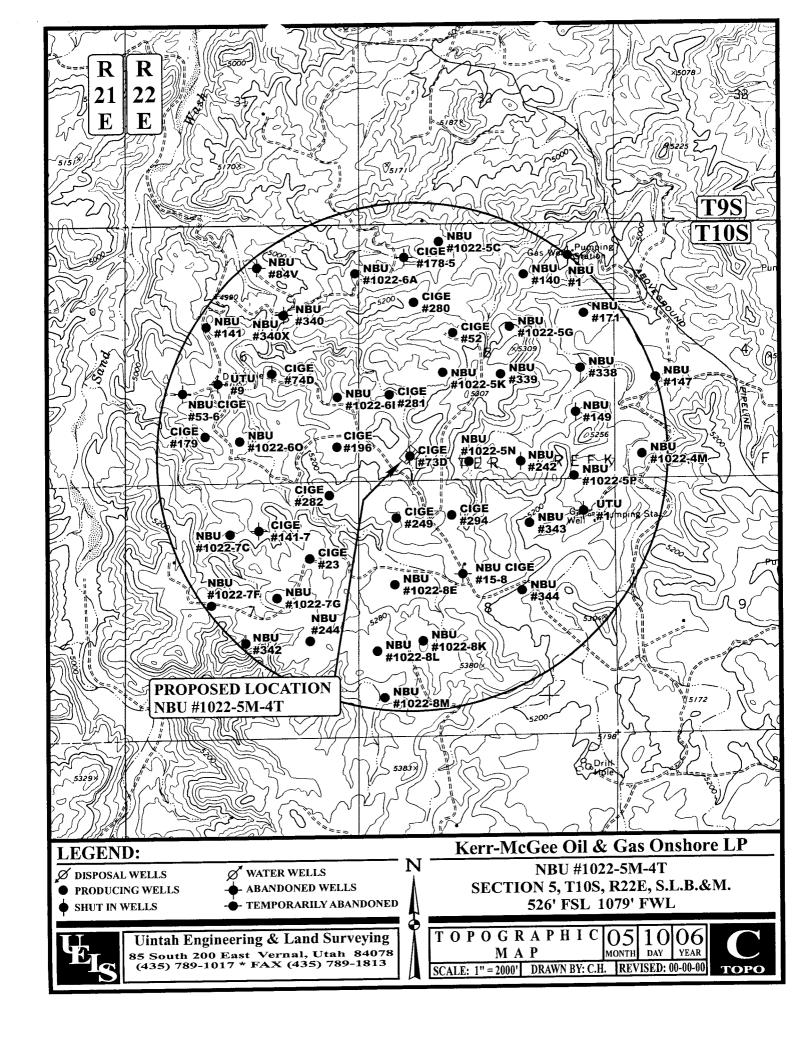
05 10 06 MONTH DAY YEAR

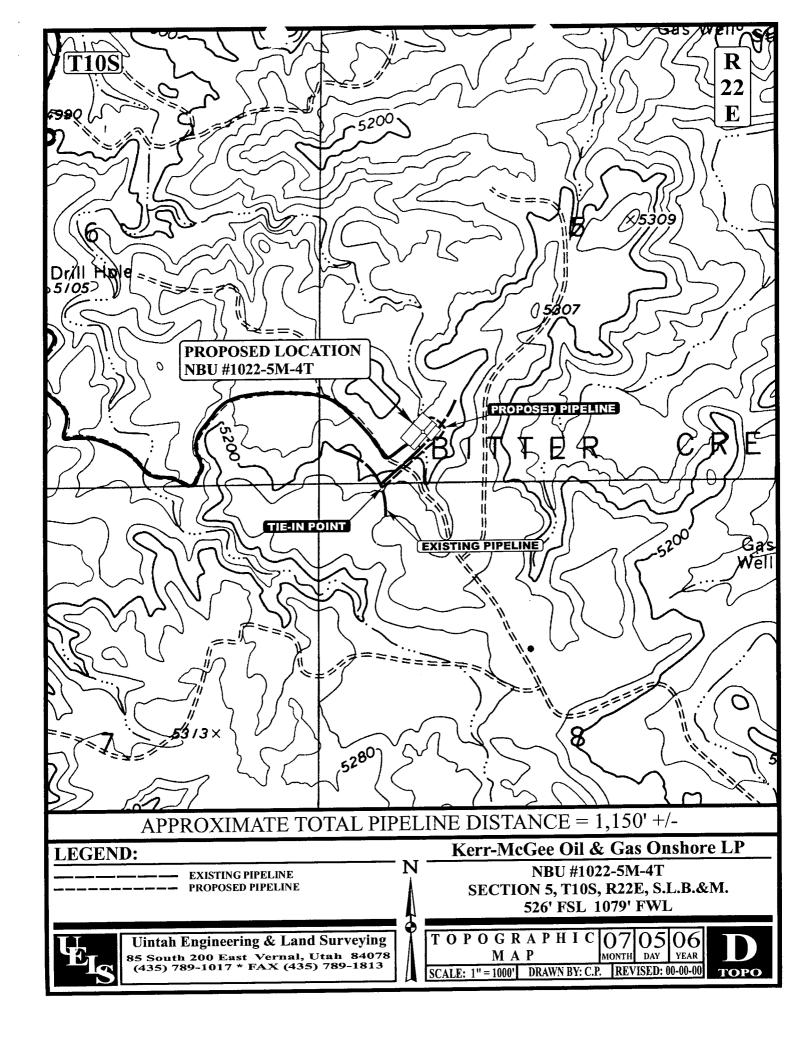
11

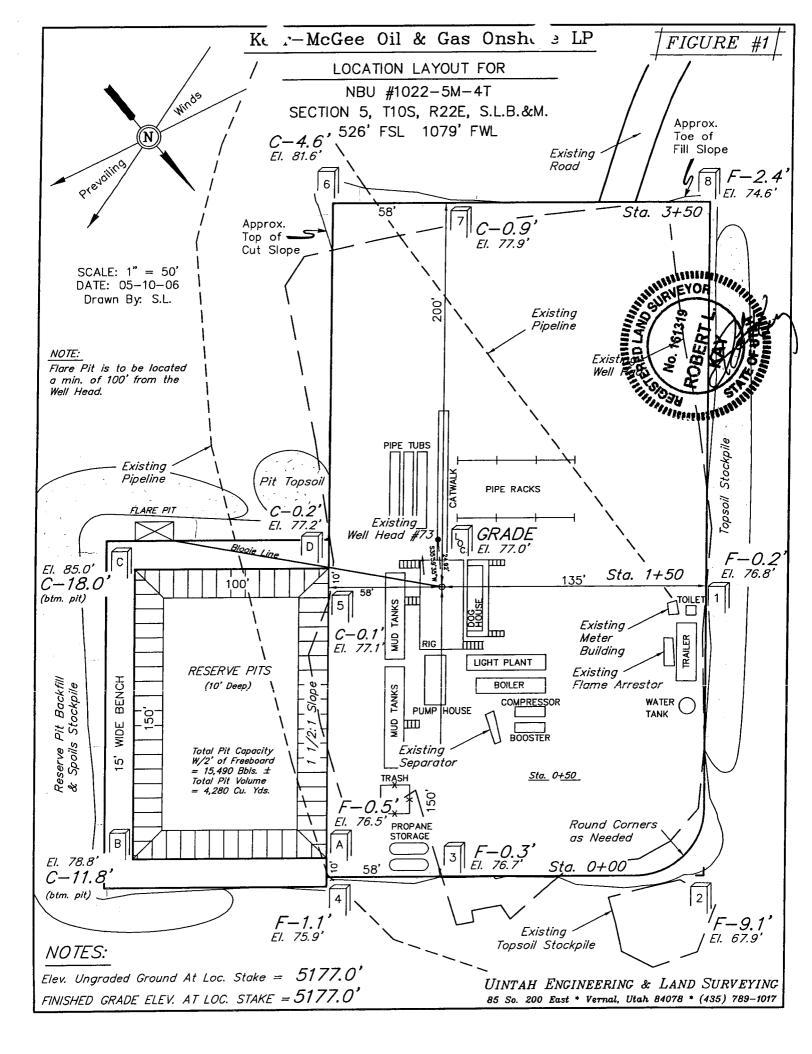
TAKEN BY: J.R. | DRAWN BY: C.H. | REVISED: 00-00-00

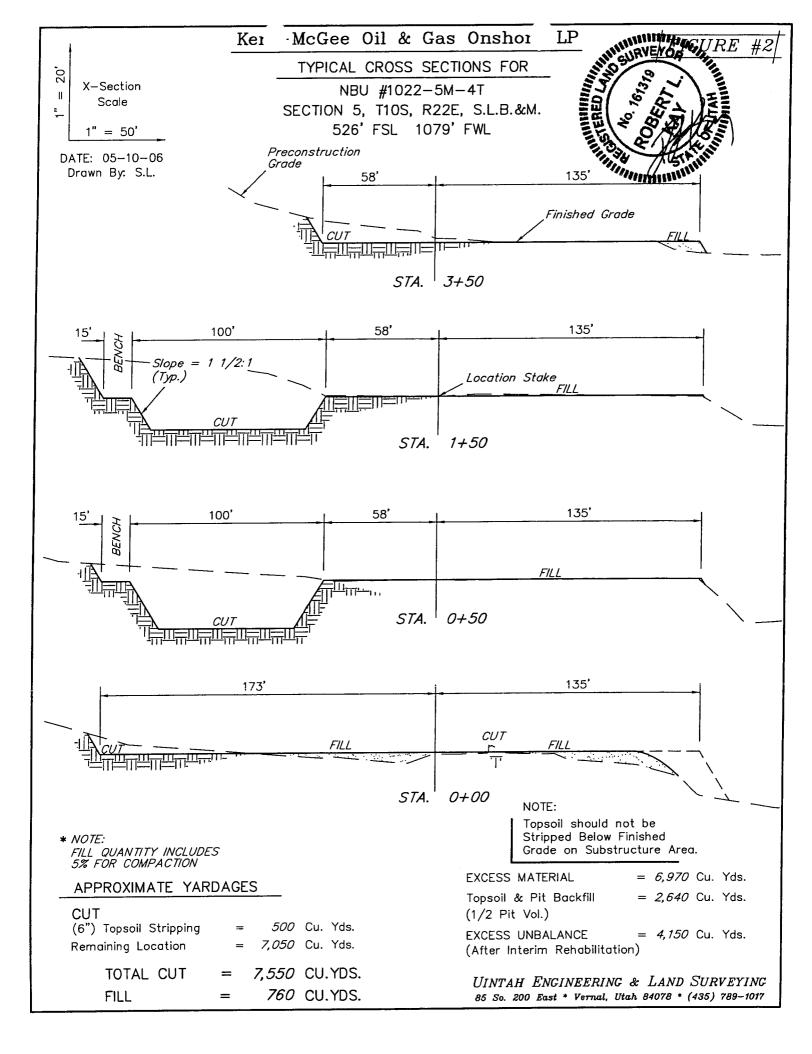






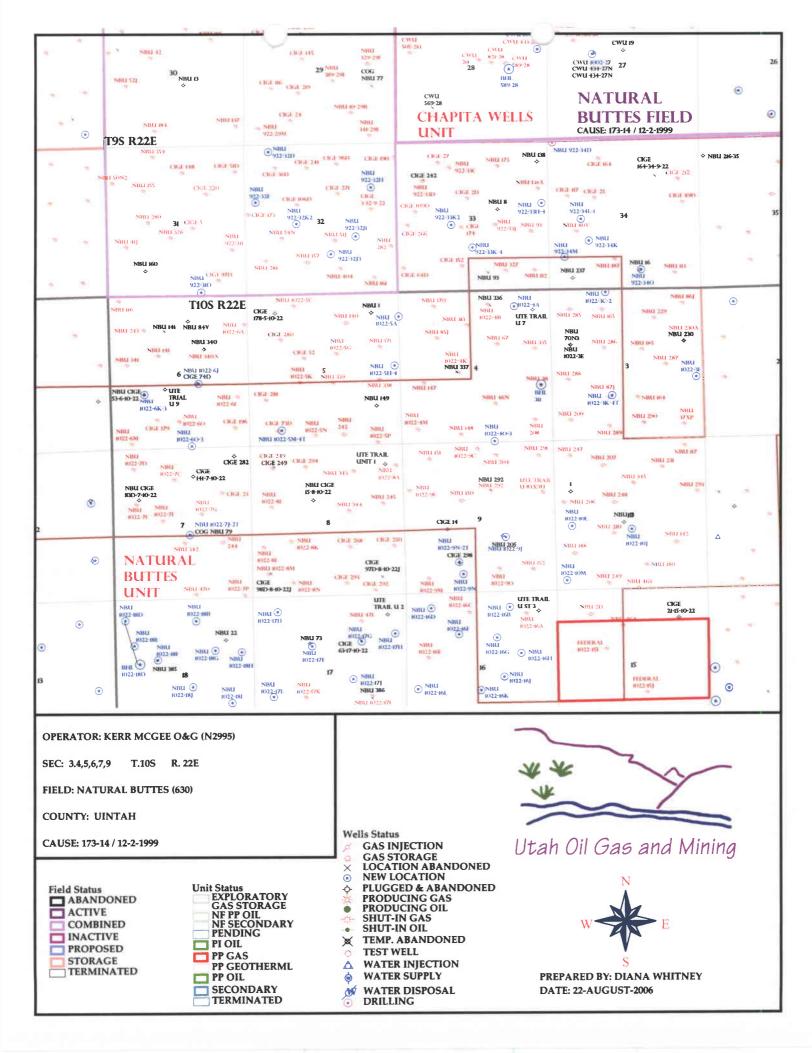






## WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 08/21/2006		API NO. ASSIG	NED: 43-047	7-38490	
WELL NAME: NBU 1022-5M-4T  OPERATOR: KERR-MCGEE OIL & GAS ( N2995 )  CONTACT: SHEILA UPCHEGO	P	HONE NUMBER:	435-781-7024	4	
PROPOSED LOCATION:	I	NSPECT LOCATN	BY: /	/	
SWSW 05 100S 220E SURFACE: 0526 FSL 1079 FWL	7	Tech Review	Initials	Date	
BOTTOM: 0526 FSL 1079 FWL	F	Engineering			
COUNTY: UINTAH		Seology			
LATITUDE: 39.97215 LONGITUDE: -109.4685 UTM SURF EASTINGS: 630784 NORTHINGS: 4425	579	Surface			
FIELD NAME: NATURAL BUTTES ( 630  LEASE TYPE: 1 - Federal  LEASE NUMBER: UTU-01191-A	)	ROPOSED FORMAT	TION: WSMT	VD.	
SURFACE OWNER: 1 - Federal		OALBED METHANE			
Plat  Bond: Fed[1] Ind[] Sta[] Fee[]  (No. WY-2357 )  Potash (Y/N)  Oil Shale 190-5 (B) or 190-3 or 190-13  Water Permit  (No. 43-8496 )  RDCC Review (Y/N)  (Date: )  Fee Surf Agreement (Y/N)  Intent to Commingle (Y/N)	LOCATION AND SITING: R649-2-3.  Unit: NATURAL BUTTES R649-3-2. General Siting: 460 From Qtr/Qtr & 920' Between WellsR649-3-3. Exception Drilling Unit Board Cause No: 173.1f- Eff Date: 12.2-A94 Siting: 440'fr ubd's f uncomm. TradeR649-3-11. Directional Drill				
Son), Separat file  Stipulations:  1- Le den Opprovid  2- Oil Sha	) <del>E</del>				



## **United States Department of the Interior**

BUREAU OF LAND MANAGEMENT

Utah State Office
P.O. Box 45155

Salt Lake City, Utah 84145-0155

IN REPLY REFER TO: 3160 (UT-922)

August 28, 2006

#### Memorandum

To:

Assistant District Manager Minerals, Vernal District

From:

Michael Coulthard, Petroleum Engineer

Subject:

2006 Plan of Development Natural Buttes Unit Uintah

County, Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following wells are planned for calendar year 2006 within the Natural Buttes Unit, Uintah County, Utah.

API#

WELL NAME

LOCATION

### (Proposed PZ Wasatch/MesaVerde)

43-047-38486 NBU 1022-3C-2 Sec 03 T10S R22E 0094 FNL 1890 FWL 43-047-38488 NBU 1022-3K-4T Sec 03 T10S R22E 1570 FSL 2044 FWL 43-047-38499 NBU 1022-5M-4T Sec 04 T10S R22E 0025 FSL 2081 FEL 43-047-38491 NBU 1022-5H-4 Sec 05 T10S R22E 0526 FSL 1079 FWL 43-047-38497 NBU 1022-6K-3 Sec 06 T10S R22E 2563 FNL 0241 FEL 43-047-38492 NBU 1022-6O-3 Sec 06 T10S R22E 1844 FSL 1161 FWL 43-047-38493 NBU 1022-7J-2T Sec 07 T10S R22E 2038 FSL 2083 FEL 43-047-38494 NBU 1022-9N-2T Sec 09 T10S R22E 1086 FSL 1850 FWL 43-047-38485 NBU 922-34L-1 Sec 34 T09S R22E 2524 FSL 1094 FWL

This office has no objection to permitting the wells at this time.

/s/ Michael L. Coulthard



### State of Utah

### Department of **Natural Resources**

MICHAEL R. STYLER Executive Director

Division of Oil, Gas & Mining

> JOHN R. BAZA Division Director

JON M. HUNTSMAN, JR. Governor

> GARY R. HERBERT Lieutenant Governor

> > August 28, 2006

Kerr McGee Oil & Gas Onshore LP 1368 S 1200 E Vernal, UT 84078

Re:

Natural Buttes Unit 1022-5M-4T Well, 526' FSL, 1079' FWL, SW SW, Sec. 5,

T. 10 South, R. 22 East, Uintah County, Utah

### Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann. § 40-6-1 et seq., Utah Administrative Code R649-3-1 et seq., and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-047-38490.

Sincerely,

Gil Hunt

Associate Director

pab **Enclosures** 

cc:

**Uintah County Assessor** 

Bureau of Land Management, Vernal District Office

Operator: Kerr McGee Oil & Gas Onshore LP						
Well Name & Number Natural Buttes Unit 1022-5M-4T						
API Number:	43-047-38490 UTU-01191-A					
Location: SW SW	Sec5_	T. 10 South	R. 22 East			

### **Conditions of Approval**

#### 1. General

Compliance with the requirements of Utah Admin. R. 649-1 *et seq.*, the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

### 2. Notification Requirements

Notify the Division within 24 hours of spudding the well.

Contact Carol Daniels at (801) 538-5284.

Notify the Division prior to commencing operations to plug and abandon the well.

• Contact Dan Jarvis at (801) 538-5338

### 3. Reporting Requirements

All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

- 4. In accordance with Order in Cause No. 190-5(b) dated October 28, 1982, the Operator shall comply with requirements of Rules R649-3-31 and R649-3-27 pertaining to Designated Oil Shale Areas. Additionally, the operator shall ensure that the surface and/or production casing is properly cemented over the entire oil shale interval as defined by Rule R649-3-31. The Operator shall report the actual depth the oil shale is encountered to the Division.
- 5. State approval of this well does not supersede the required federal approval, which must be obtained prior to drilling.

Form 3160-3 (August 1999)

Med Challes

FORM APPROVED OMB No. 1004-0136

Expires November 30, 2000

## UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

AUG 1 5 2006

Lease Serial No.

BUREAU OF LAND MAN	UTU-01191-A	UTU-01191-A				
APPLICATION FOR PERMIT TO	6. If Indian, Allottee	or Tribe Name				
la. Type of Work: X DRILL REI	UNIT #89100890	7. If Unit or CA Agreement, Name and No.  UNIT #891008900A  8. Lease Name and Well No.				
b. Type of Well: Oil Well Gas Well Other		Single Zone	Multiple Zone	NBU 1022-5N	1-4T	
2. Name of Operator KERR McGEE OIL & GAS ONSHORE LP				9. API Well No.	38490	
1368 SOUTH 1200 EAST VERNAL, UT 84078	(435) 781		ode)	10. Field and Pool, o	res	
4. Location of Well (Report location clearly and in accordance with At surface SESWSW 526'FSL, 1079'FWL At proposed prod. Zone	any State red	quirements.*)		SEC. 5, T10S, R	or Blk, and Survey or Area	
14. Distance in miles and direction from nearest town or post office* 22.8 MILES SOUTHEAST OF OURAY, UTAH	•			12. County or Parish UINTAH	13. State UTAH	
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig, unit line, if any)	16. No. of a	Acres in lease	<ul><li>17. Spacing Unit</li><li>40.00</li></ul>	init dedicated to this well		
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.  REFER TO TOPO C	19. Propose <b>9070'</b>	ed Depth	20. BLM/BIA BOBOND NO: W			
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 5177'UNGRADED GL	22. Approx	imate date work w	ill start*	23. Estimated duration		
	24. /	Attachments				
The following, completed in accordance with the requirements of On	shore Oil and	l Gas Order No. 1,	shall be attached to	this form:		
1. Well plat certified by a registered surveyor.		4. Bond to co	over the operations	unless covered by an exis-	ting bond on file (see	
2. A Drilling Plan.		Item 20 ab	ove).			
3. A Surface Use Plan (if the location is on National Forest System I	ands, the	5. Operator c	ertification.			
SUPO shall be filed with the appropriate Forest Service Office.		6. Such other authorized	•	ation and/or plans as may	be required by the	
25. S(gnas) (1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/		me (Printed/Typed			Date <b>8/10/2006</b>	
Title	-	··				
REGULATORY ANALYST	ı No	me (Printed/Typed	7)		Date	
Approved by (Signature)	l Na	TERRY A	./	į	4-12-2007	
Title Assistant Field Manager Lands & Mineral Resources	Off	ice <b>VE</b>	RNAL FIEL			
Application approval does not warrant or certify that the applicant ho	olds legal or e	equitable title to the	ose rights in the sub	ject lease which would ent	itle the applicant to conduc	
operations thereon.  Conditions of approval, if any, are attached.						

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United

\*(Instructions on reverse)

RECEIVED

APR 27 2007

DIV. OF OIL, GAS & MINING

Entered in AFMSS

Date 11 20 0 6

States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

NOTICE OF APPROVAL

CONDITIONS OF APPROVAL ATTACHE



### UNITED STATES DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT VERNAL FIELD OFFICE** 170 South 500 East

**VERNAL, UT 84078** (435) 781-4400



### CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL

Company: Kerr-McGee Oil & Gas Onshore, LP Location:

NBU 1022-5M-4T

SWSW, Sec. 5, T10S, R22E UTU-01191-A Lease No:

Well No: API No:

43-047-38490

**Natural Buttes Unit** Agreement:

	Al a	Office Disease Normalism	Call Dhana Number
Title	Name	Office Phone Number	Cell Phone Number
Petroleum Engineer:	Matt Baker	435-781-4490	435-828-4470
Petroleum Engineer:	Michael Lee	435-781-4432	435-828-7875
Petroleum Engineer:	James Ashley	435-781-4470	435-828-7874
Petroleum Engineer:	Ryan Angus	435-781-4430	435-828-7368
Supervisory Petroleum Technician:	Jamie Sparger	435-781-4502	435-828-3913
NRS/Enviro Scientist:	Paul Buhler	435-781-4475	435-828-4029
NRS/Enviro Scientist:	Karl Wright	435-781-4484	
NRS/Enviro Scientist:	Holly Villa	435-781-4404	
NRS/Enviro Scientist:	Melissa Hawk	435-781-4476	435-828-7381
NRS/Enviro Scientist:	Chuck MacDonald	435-781-4441	
NRS/Enviro Scientist:	Jannice Cutler	435-781-3400	
NRS/Enviro Scientist:	Michael Cutler	435-781-3401	
NRS/Enviro Scientist:	Anna Figueroa	435-781-3407	
NRS/Enviro Scientist:	Verlyn Pindell	435-781-3402	
NRS/Enviro Scientist:	Darren Williams	435-781-4447	
NRS/Enviro Scientist:	Nathan Packer	435-781-3405	
		Fax: 435-781-4410	

### A COPY OF THESE CONDITIONS SHALL BE FURNISHED TO YOUR FIELD REPRESENTATIVE TO INSURE COMPLIANCE

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR Part 3160), and this approved Application for Permit to Drill including Surface and Downhole Conditions of Approval. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction. drilling, and completion operations. This permit is approved for a one-year period. An additional year extension may be applied for by sundry notice prior to expiration.

#### NOTIFICATION REQUIREMENTS

**Location Construction** (Notify NRS/Enviro Scientist) **Location Completion** (Notify NRS/Enviro Scientist) Spud Notice (Notify Petroleum Engineer) Casing String & Cementing (Notify Supervisory Petroleum Technician) **BOP & Related Equipment Tests** (Notify Supervisory Petroleum Technician) First Production Notice (Notify Petroleum Engineer)

- Forty-Eight (48) hours prior to construction of location and access roads.
- Prior to moving on the drilling rig.
- Twenty-Four (24) hours prior to spudding the well.
- Twenty-Four (24) hours prior to running casing and cementing all casing strings.
- Twenty-Four (24) hours prior to initiating pressure tests.
- Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.

Page 2 of 6

Well Name: NBU 1022-5M-4T 4/10/2007

## SURFACE USE PROGRAM CONDITIONS OF APPROVAL (COAs)

#### **General Surface COAs**

- If there is an active Gilsonite mining operation within 2 miles of the well location, operator shall notify the Gilsonite operator at least 48 hours prior to any blasting during construction.
- If paleontological materials are uncovered during construction, the operator is to immediately stop work and contact the Authorized Officer AO. A report will be prepared by a BLM permitted paleontologist and submitted to the AO at the completion of surface disturbing activities.

### **Specific Surface COAs**

- Paint all facilities Fuller O'Brian color Carlsbad Canyon (2.5Y 6/2). Any paint brand may be used provided the colors match.
- The authorized officer may prohibit surface disturbing activities during wet and muddy periods to minimize watershed damage. This limitation does not apply to operation and maintenance of producing wells.
- The seed mix for this location shall be:

Galleta grass

Hilaria jamesii

20 lbs. /acre

- All pounds are in pure live seed.
- Reseeding may be required if first seeding is not successful.
- The topsoil from the reserve pit should be stripped and piled separately near the reserve pit. When the reserve pit is closed, it shall be recontoured and the topsoil respread, and the area shall be seeded in the same manner as the location topsoil.
- Once the location is plugged and abandoned, it shall be recontoured to natural contours, topsoil respread where appropriate, and the entire location seeded with the recommended seed mix. Seeding should take place by broadcasting the seed and walking it into the soil with a dozer immediately after the dirt work is completed.
- Within 90 calendar days of the approval date for this Application for Permit to Drill (APD), the operator/lessee shall submit to the Authorized Officer (AO), on Sundry Notice Form 3160-5, an Interim Surface Reclamation Plan for surface disturbance on well pads, access roads, and pipelines. At a minimum, this will include the reshaping of the pad to the original contour to the extent possible; the respreading of the top soil up to the rig anchor points; and, the area reseeded using appropriate reclamation methods. The AO will provide written approval or concurrence within 30 calendar days of receipt.

Page 3 of 6 Well Name: NBU 1022-5M-4T 4/10/2007

### DOWNHOLE CONDITIONS OF APPROVAL

### SITE SPECIFIC DOWNHOLE CONDITIONS OF APPROVAL

- A surface casing shoe integrity test shall be performed.
- Production casing cement top shall be at a minimum of 200' above the surface casing shoe.

All provisions outlined in Onshore Oil & Gas Order #2 Drilling Operations shall be strictly adhered to. The following items are emphasized:

### DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS

- The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
- Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.
- Blowout prevention equipment BOPE shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times. Choke manifolds shall be located outside of the rig substructure.
- All BOPE components shall be inspected daily and those inspections shall be recorded
  in the daily drilling report. Components shall be operated and tested as required by
  Onshore Oil & Gas Order No. 2 to insure good mechanical working order. All BOPE
  pressure tests shall be performed by a test pump with a chart recorder and <u>NOT</u> by the
  rig pumps. Test shall be reported in the driller's log.
- BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.
- Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.
- No aggressive/fresh hard-banded drill pipe shall be used within casing.
- Cement baskets shall not be run on surface casing.
- The operator must report all shows of water or water-bearing sands to the BLM. If flowing water is encountered it must be sampled, analyzed, and a copy of the analyses submitted to the BLM Vernal Field Office.
- The operator must report encounters of all non oil & gas mineral resources such as Gilsonite, tar sands, oil shale, trona, etc. to the Vernal Field Office, in writing, within 5 working days of each encounter. Each report shall include the well name/number, well location, date and depth from KB or GL of encounter, vertical footage of the encounter and, the name of the person making the report along with a telephone number shall the BLM need to obtain additional information.

Page 4 of 6 Well Name: NBU 1022-5M-4T 4/10/2007

 A complete set of angular deviation and directional surveys of a directional well will be submitted to the Vernal BLM office engineer within 30 days of the completion of the well.

- Chronologic drilling progress reports shall be filed directly with the BLM, Vernal Field
  Office on a weekly basis in sundry, letter format or e-mail to the Petroleum Engineers
  until the well is completed.
- A cement bond log CBL will be run from the production casing shoe to the <u>top of cement</u> and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.
- Please submit an electronic copy of all other logs run on this well in LAS format to UT\_VN\_Welllogs@BLM.gov. This submission will supersede the requirement for submittal of paper logs to the BLM.
- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Vernal Field Office.

Page 5 of 6 Well Name: NBU 1022-5M-4T

4/10/2007

#### **OPERATING REQUIREMENT REMINDERS:**

 All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well.

- In accordance with 43 CFR 3162.4-3, this well shall be reported on the "Monthly Report of Operations" Oil and Gas Operations Report OGOR starting with the month in which operations commence and continue each month until the well is physically plugged and abandoned. This report shall be filed in duplicate, directly with the Minerals Management Service, P.O. Box 17110, Denver, Colorado 80217-0110, or call 1-800-525-7922 303 231-3650 for reporting information.
- Shall the well be successfully completed for production, the BLM Vernal Field office must be
  notified when it is placed in a producing status. Such notification will be by written
  communication and must be received in this office by not later than the fifth business day
  following the date on which the well is placed on production. The notification shall provide,
  as a minimum, the following informational items:
  - o Operator name, address, and telephone number.
  - Well name and number.
  - o Well location ¼¼, Sec., Twn, Rng, and P.M..
  - Date well was placed in a producing status date of first production for which royalty will be paid.
  - o The nature of the well's production, i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons.
  - o The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.
  - o Unit agreement and/or participating area name and number, if applicable.
  - o Communitization agreement number, if applicable.
- Any venting or flaring of gas shall be done in accordance with Notice to Lessees NTL 4A and needs prior approval from the BLM Vernal Field Office.
- All undesirable events fires, accidents, blowouts, spills, discharges as specified in NTL 3A will be reported to the BLM, Vernal Field Office. Major events, as defined in NTL3A, shall be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of Operations and Production.
- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" BLM Form 3160-4 shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include

Page 6 of 6 Well Name: NBU 1022-5M-4T 4/10/2007

deviation surveys, sample descriptions, strip logs, core data, drill stem test data, and results of production tests if performed. Samples cuttings, fluid, and/or gas shall be submitted only when requested by the BLM, Vernal Field Office.

- All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, shall have prior written approval from the BLM Vernal Field Office.
- Oil and gas meters shall be calibrated in place prior to any deliveries. The BLM Vernal Field
  Office Petroleum Engineers will be provided with a date and time for the initial meter
  calibration and all future meter proving schedules. A copy of the meter calibration reports
  shall be submitted to the BLM Vernal Field Office. All measurement facilities will conform to
  the API standards for liquid hydrocarbons and the AGA standards for natural gas
  measurement. All measurement points shall be identified as the point of sale or allocation
  for royalty purposes.
- A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted to the BLM Vernal Field Office within 30 days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with Onshore Oil & Gas Order No. 3.
- Any additional construction, reconstruction, or alterations of facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a suitable plan and need prior approval of the BLM Vernal Field Office. Emergency approval may be obtained orally, but such approval does not waive the written report requirement.
- No location shall be constructed or moved, no well shall be plugged, and no drilling or
  workover equipment shall be removed from a well to be placed in a suspended status
  without prior approval of the BLM Vernal Field Office. If operations are to be suspended for
  more than 30 days, prior approval of the BLM Vernal Field Office shall be obtained and
  notification given before resumption of operations.
- Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.
- Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in order that a representative may witness plugging operations. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" Form BLM 3160-5 must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.

Form 5, 60-5 (August 1999)

### **UNITED STATES** DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT**

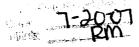
FORM APPROVED OMB No. 1004-0135 Expires Inovember 30, 2000

UTU-01191-A

5. Lease Serial No.

SUNDRY NOTICES AND	REPORTS	ON WELLS
--------------------	---------	----------

Do not use this form for proposals to drill or reenter an abandoned well. Use Form 3160-3 (APD) for such proposals.					6. If Indian, Allottee of Tribe Name		
						A/Agreement, Name and/or No.	
1. Type of Well	Пол				8. Well Name	and No.	
Oil Well Gas Well  2. Name of Operator	Other				NBU 1022-		
•	AC ONCHORE LA				9. API Well N		
KERR MCGEE OIL AND GA  3a. Address	13 UNSHUKE LF	3b. Pho	ne No. (includ	de area code)	430473849		
	JEDNIAL LITALI 84078		•			ool, or Exploratory Area	
1368 SOUTH 1200 EAST, V 4. Location of Well (Footage, Sec., T.			31-7003		NATURAL	_	
	, IL, M., OF But vey Descriptions				11. County or		
526' FSL, 1079' FWL SWSW, SEC 5-T10S-R22E					UINTAH, U		
12. CHECK APPI	ROPRIATE BOX(ES) TO I	NDICAT	E NATURE	OF NOTICE, I	REPORT, OR C	OTHER DATA	
TYPE OF SUBMISSION			TY	PE OF ACTIO	N		
Notice of Intent	Acidize Alter Casing	Deep	en ure Treat	Reclamati		Water Shut-Off Well Integrity	
Subsequent Report	Casing Repair Change Plans	_	Construction and Abandon	_	ily Abandon	Other APD EXTENSION DOGM	
Final Abandonment Notice	Convert to Injection	Plug	Back	Water Dis	posal		
determined that the site is ready for fin THE OPERATOR REQUES LOCATION SO THAT THE BY THE DIVISION OF OIL,	TS AUTHORIZATION DRILLING OPERATIO	NS MA	Y BE COM	MPLETED. T 1006. p		AL APD WAS APPROVED by the on of	
				Date: By:	07-18 Rul	allo	
14. I hereby certify that the foregoing in Name (Printed/Typed)  RAMEY	is true and correct HOOPES	Title		LAN	D SPECIALIS	STI	
Signature Kamers	Storped	Date			July 5, 2007		
	THIS SPACE	E FOR FE	DERAL OR	STATE USE			
Approved by			Title		Date		
Conditions of approval, if any, are attached certify that the applicant holds legal or equivalent which would entitle the applicant to conduct	itable title to those rights in the substance of the subs	oject lease	Office		1		
Title 18 U.S.C. Section 1001, make false, fictitious or fraudulent stateme	it a crime for any person knowns or representations as to an	owingly a y matter v	nd willfully to within its juris	o make to any de diction.	epartment or age	ncy of the United States any	
(Instructions on reverse)	Kengal Dalam		A report of	an market		· Colonial State	



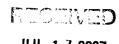
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JUL 1 7 2007

# Application for Permit to Drill Request for Permit Extension Validation

(this form should accompany the Sundry Notice requesting permit extension)

API: Well Name:	4304738490 NBU 1022-5M-4T		
Location:	SWSW, SEC 5-T10	S-R22E	
Company Per	mit Issued to:	KERR-MCGEE OIL	AND GAS ONSHORE LP
<b>Date Original</b>	Permit Issued:	8/28/2006	
above hereby	verifies that the	information as sub	Il on the property as permitted omitted in the previously pes not require revision.
Following is a verified.	checklist of some	e items related to t	the application, which should be
If located on pagreement be	rivate land, has t en updated? Yes	the ownership cha s □ No ☑	nged, if so, has the surface
Have any well the spacing or	s been drilled in stationary	the vicinity of the pents for this location	oroposed well which would affect n? Yes⊡No☑
Has there bee	en any unit or othe operation of this p	er agreements put proposed well? Ye	in place that could affect the s□No☑
Have there be of-way, which	en any changes could affect the	to the access rout proposed location'	e including ownership, or right- ? Yes⊡No ☑
Has the appro	oved source of wa	ater for drilling cha	nged? Yes□No⊠
Have there be which will requestion? Yes	uire a change in l	changes to the su plans from what w	rface location or access route as discussed at the onsite
Is bonding stil	l in place, which	covers this propos	sed well? Yes ☑No□
NATIL	ey Hoop	ld_	7/5/2007 Date
Signature	19		Date
Title: LAND S	PECIALIST I		
Representing	Kerr McGee Oil a	and Gas Onshore LP	



The Capoll, Cas a mining

Form 3 160-5 (August 1999)

## UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

OMB No. 1004-0135
Expires Jnovember 30, 2000
ENT

5. Lease Serial No.

### SUNDRY NOTICES AND REPORTS ON WELLS

UTU-01191-A

6. If Indian, Allottee or Tribe Name

FORM APPROVED

Do not use thi abandoned well		6. If Indian, Allottee or Tribe Name			
SUBMIT IN TRIPL  1. Type of Well  Oil Well X Gas Well	e side	7. If Unit or CA/Agreement, Name and/or No. UNIT #891008900A NATURAL BUTTES UNIT 8. Well Name and No.			
2. Name of Operator				NBU 102	2-5M-4T
KERR-McGEE OIL & GAS ON	SHORE LP			9. API Well N	0.
3a. Address		3b. Phone No. (include	area code)	430473849	0
1368 SOUTH 1200 EAST VEI	RNAL, UT 84078	(435) 781-7024		10. Field and Po	ool, or Exploratory Area
4. Location of Well (Footage, Sec., T., I	R., M., or Survey Description)	<del> </del>		NATURAL I	BUTTES
SW/SW SEC. 5, T10S, R22E 5	526'FSL, 1079'FWL			11. County or F	Parish, State
12. CHECK A	PPROPRIATE BOX(ES) TO	INDICATE NATURE	OF NOTICE, REI	PORT, OR OTH	IER DATA
TYPE OF SUBMISSION		TY	PE OF ACTION		
Notice of Intent  Subsequent Report	Acidize Alter Casing Casing Repair	Deepen Fracture Treat New Construction	Production ( Reclamation Recomplete		Water Shut-Off Well Integrity  Other REQUEST TO
	Change Plans	Plug and Abandon	Temporarily		CHANGE MUD WT
Final Abandonment Notice	Convert to Injection	Plug Back	Water Dispo	osal	
13. Describe Proposed or Completed Oper If the proposal is to deepen directional Attach the Bond under which the work following completion of the involved testing has been completed. Final All determined that the site is ready for final	illy or recomplete horizontally, and will be performed or provide operations. If the operation respondent ment of the performent of the performance of	give subsurface locations are the Bond No. on file with ults in a multiple completion	nd measured and true BLM/BIA. Requion or recompletion	ne vertical depths red subsequent re in a new interval	of all pertinent markers and zones. eports shall be filed within 30 days , a Form 3160-4 shall be filed once
THE OPERATOR REQUESTS MUD WITH 0-8% BIO DIESEL				FRESH WAT	rer .
		, by th	ં જ્		RECEIVED
		Accepted by the Utah Division of Cas and William Officer	nine Mala		JUL 3 1 2007
		Oil Gas COFF	) 0	DIM	OF OIL, GAS & MINING

14. I hereby certify that the foregoing is true and correct

Name (Printed/Typed)
SHEILA HPCHEGO
Signature

Date
July 24, 2007

Title
SENIOR LAND ADMIN SPECIALIST

Date
July 24, 2007

This SPACE FOR FEDERAL OR STATE USE

Approved by
Title
Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Title 18 U.S.C. Section 1001, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

SIAIL OF UIAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

ENTITY ACTION FORM						
Operator:	KERR McGEE OIL & GAS ONSHORE LP	Operator Account Number:	N 2995			
Address:	1368 SOUTH 1200 EAST	<del></del>				
	city VERNAL					
	state UT zip 84078	Phone Number:	(435) 781-7024			

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304738528	NBU 1022-6C-4		NENW	6	108	22E	UINTAH
Action Code	Current Entity Number	New Entity Number	s	Spud Date		Entity Assignment Effective Date	
В	99999	2900		8/1/200	7	8,	19/01

API Number	Well	Name	QQ	Sec	Twp	Rng	County
4304738490	NBU 1022-5M-4T		swsw	5	108	22E	UINTAH
Action Code	Current Entity Number	New Entity Number	S	Spud Date		Entity Assignment Effective Date	
B	99999	2900		8/1/2007			19/07
	J PETE MARTIN BUCKE D WELL LOCATION ON	_ 1 1 1 1 0 .	571 0 HRS.	VD		-	

Well 3

API Number	Well	lame	QQ	Sec	Twp	Rng	County
Action Code	Current Entity Number	New Entity Number	s	Spud Da	te		ity Assignment ffective Date
omments:							

### **ACTION CODES:**

(5/2000)

- A Establish new entity for new well (single well only)
- B Add new well to existing entity (group or unit well)
- C Re-assign well from one existing entity to another existing entity
- Re-assign well from one existing entity to a new entity
- E Other (Explain in 'comments' section)

SHEILA UPCHEGO

Signature SENIOR LAND SPECIALIST Date

RECEIVED AUG 0 6 2007

DIV. OF OIL, GAS & MINING



Form 3160-5 (August 1999)

## UNITED STATES DEPARTMENT OF THE INTERIOR

## BUREAU OF LAND MANAGEMENT

### SUNDRY NOTICES AND REPORTS ON WELLS

FORM APPROVED OMB No. 1004-0135 Expires Jnovember 30, 2000

5. Lease Serial No.

UTU-01191-A
C ICI. diam Alleston on Triba Nama

Do not use this form for proposals to drill or reenter an abandoned well. Use Form 3160-3 (APD) for such proposals.				6.	6. If Indian, Allottee or Tribe Name			
	CATE – Other instruc			side	UN	IIT #8910	N/Agreement, Name and/or No. 08900A BUTTES UNIT	
Type of Well     Oil Well     Gas Well     Name of Operator	Other				8.	Well Name a	and No.	
KERR-McGEE OIL & GAS ON		3h Phot	ne No. (include a	area code)		API Well No		
<ul><li>3a. Address</li><li>1368 SOUTH 1200 EAST VEH</li><li>4. Location of Well (Footage, Sec., T., I</li></ul>	RNAL, UT 84078	ŀ	31-7024		10.		ol, or Exploratory Area	
SW/SW SEC. 5, T10S, R22E 5						County or Pa	arish, State DUNTY, UTAH	
12. CHECK A	APPROPRIATE BOX(ES) TO	INDICAT	E NATURE C	F NOTI	CE, REPOR	r, or oth	ER DATA	
TYPE OF SUBMISSION			TY	PE OF A	CTION			
Notice of Intent  Subsequent Report  Final Abandonment Notice	Acidize Alter Casing Casing Repair Change Plans Convert to Injection	New	ure Treat  Construction  and Abandon	Red	duction (Start clamation complete nporarily Aba tter Disposal		Water Shut-Off Well Integrity  Other CSG.	
13. Describe Proposed or Completed Ope If the proposal is to deepen direction. Attach the Bond under which the wo following completion of the involved testing has been completed. Final A determined that the site is ready for fin	ally or recomplete horizontally, go rk will be performed or provide to operations. If the operation results bandonment Notices shall be file that inspection.	the Bond National Nat	ice locations and io. on file with ltiple completion all requireme	BLM/BIA on or recor	d and true ve A. Required and appletion in a ding reclamat	subsequent re new interval	or an pertinent markets and zones, aports shall be filed within 30 days, a Form 3160-4 shall be filed once en completed, and the operator has	
MIRU BILL MARTIN AIR RIG 32.3# H-40 AND 10 JTS OF 3 YIELD. TAILED CMT W/100 S SX PREM CLASS G @15.8 P	6# J-55 SURFACE CSG. SX PREM CLASS G @15	LEAD . 8 PPG	CMT W/365 1.15 YIELD.	SX PR . DOWN	EM CLAS I BACKSI	S G @15 DE. TOP	.8 PPG 1.15 OUT W/310	
WORT.							RECEIVED	
							SEP 1 0 2007	
14. I hereby certify that the foregoing is	true and correct		<del> </del>				DIV. OF OIL, GAS & MINING	
Name (Printed/Typed) SHEILA UPCHEGO		Title SEN	IIOR LAND	ADMIN	SPECIAL			
Signatura	M/M/M	Date Sep	tember 4, 2	007				
The state of	THIS SPACE	CE FOR F	EDERAL OR S	STATE U	SE			
Approved by			Title			Date		
Conditions of approval, if any, are attache certify that the applicant holds legal or eq which would entitle the applicant to condu	uitable title to those rights in the su	warrant or ibject lease	Office				Sala Haitad States ony	

Form 3 160-5 (August 1999)

## UNITED STATES DEPARTMENT OF THE INTERIOR

**BUREAU OF LAND MANAGEMENT** 

5. Lease Serial No.

FORM APPROVED

OMB No. 1004-0135

Expires In ovember 30, 2000

6. If Indian, Allottee or Tribe Name

UTU 01191-A

October 2, 2007

\_Date

## SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or reenter an abandoned well. Use Form 3160-3 (APD) for such proposals.

	<u> </u>							
SUBMIT IN TRIPI	ICATE – Other instructi	ions on reverse si	ide	7. If Unit or CA/Agreement, Name and/or No.				
SOBIUTI IN TRIFE	CATE - Other maduct	ions on levelse si	ac	UNIT 891008900A				
1. Type of Well				NATURAL BUTTES UNIT				
Oil Well X Gas Well	Other			8. Well Name and No.				
2. Name of Operator				NBU 1022-5M-4T				
KERR MCGEE OIL AND GA	AS ONSHORE LP		9. API Well No.					
3a. Address	31	o. Phone No. (include ar	,	4304738490				
1368 SOUTH 1200 EAST V	ERNAL, UT 84078 4	35-781-7003		10. Field and Pool, or Exploratory Area				
4. Location of Well (Footage, Sec.,	T., R., M., or Survey Description)			NATURAL BUTTES				
526'FSL-1079'FWL				11. County or Parish, State				
SWSW SEC 5-T10S-R22E				UINTAH COUNTY, UT				
12. CHECK APP	ROPRIATE BOX(ES) TO INI	DICATE NATURE OF	NOTICE, RI	EPORT, OR OTHER DATA				
TYPE OF SUBMISSION		TYPE (	OF ACTION					
Notice of Intent  Subsequent Report  Final Abandonment Notice	Acidize  Alter Casing  Casing Repair  Change Plans  Convert to Injection	Alter Casing Fracture Treat Reclamation Well Integrity Casing Repair New Construction Recomplete Other FINAL DRILLING Change Plans Plug and Abandon Temporarily Abandon OPERATIONS						
13. Describe Proposed or Completed Operations (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLMBIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.  FINISHED DRILLING FROM 6310 TO 8980 ON 9/27/2005. RAN 4.1/2" 11.6# I-80 PRODUCTION CSG. LEAD CMT W/465 PREM LITE II @ 11.3 PPG 3.38 YLD. TAILED W/1250 SX 50/50 PREM POZ @ 14.3 PPG 1.31 YLD DISPLACEMENT 139, NIPPLE DOWN, SET SLIPS, CLEAN PITS.  RELEASE RIG 12 09/27/2007 @ 1200 HRS.  PIV. OF OIL, GAS & MINING								
14. I hereby certify that the foregoing Name (Printed/Typed)		Title	WOD LAN					
SHEILA U	JPCHEGO	Date SE	NIOK LAN	D ADMIN SPECIALIST				
AMBRITE - // / /		LUME						

certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon. Title 18 U.S.C. Section 1001, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

THIS SPACE FOR FEDERAL OR STATE USE Title

Office

Conditions of approval, if any, are attached Approval of this notice does not warrant or

Approved-by-

Form 3160-5 (August 1999)

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED OMB No. 1004-0135 Expires Jnovember 30, 2000

DIV. OF OIL, GAS & MINING

6. If Indian, Allottee or Tribe Name

Lease Serial No.

UTU-01191-A

#### SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or reenter an abandoned well. Use Form 3160-3 (APD) for such proposals.

abandoned well.								
SUBMIT IN TRIPL	SUBMIT IN TRIPLICATE – Other instructions on reverse side							
1. Type of Well			NATURAL BUTTES UNIT					
Oil Well X Gas Well	8. Well Name and No.							
2. Name of Operator			NBU 1022-5M-4T					
KERR-McGEE OIL & GAS (	ONSHORE LP	- <del></del> -	9. API Well No.					
3a. Address		3b. Phone No. (include area code)	4304738490					
1368 SOUTH 1200 EAST \	ERNAL, UT 84078	(435) 781-7024	10. Field and Pool, or Exploratory Area					
4. Location of Well (Footage, Sec., 2	T., R., M., or Survey Description	on)	NATURAL BUTTES					
		And the second s	11. County or Parish, State					
SW/SW SEC. 5, T10S, R22	E 526'FSL, 1079'FWL		UINTAH COUNTY, UTAH					
12. CHECK APP	ROPRIATE BOX(ES) TO	INDICATE NATURE OF NOTICE,	REPORT, OR OTHER DATA					
TYPE OF SUBMISSION		TYPE OF ACTION	ON					
Notice of Intent  Subsequent Report  Final Abandonment Notice	Acidize Alter Casing Casing Repair Change Plans Convert to Injection	Fracture Treat Reclama New Construction Recompl	ete					
If the proposal is to deepen directions Attach the Bond under which the wo following completion of the involved	ally or recomplete horizontally, rk will be performed or provide operations. If the operation res bandonment Notices shall be fi	give subsurface locations and measured and the Bond No. on file with BLM/BIA. Rec ults in a multiple completion or recompletio	f any proposed work and approximate duration thereof, true vertical depths of all pertinent markers and zones, quired subsequent reports shall be filed within 30 days in a new interval, a Form 3160-4 shall be filed once clamation, have been completed, and the operator has					
THE SUBJECT WELL LOC	ATION WAS PLACED	O ON PRODUCTION ON 12/08	3/2007 AT 10:30 AM					
PLEASE REFER TO THE A	ATTACHED CHRONO	LOGICAL WELL HISTORY.	RECEIVED					
			DEC 1 4 2007					

14. I hereby certify that the foregoing is true and correct
Name (Printed/Typed)
SHEILA UPCHEGO
SENIOR LAND ADMIN SPECIALIST

Date
December 11, 2007

Title

SPACE FOR FEDERAL OR STATE USE

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Title 18 U.S.C. Section 1001, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.



#### Anadarko Petroleum Corporation 1368 S. 1200 East Vernal, UT 84078

#### **CHRONOLOGICAL WELL HISTORY**

NBU 1022-5M-4T

SESW, SEC. 5, T10S, R22E UINTAH COUNTY, UT

DATE	ACTIVITY		STATUS	
07/20/07	LOCATION STARTED	ENSIGN 12	V	
07/31/07	LOCATION COMPLETED	ENSIGN 12	P/L IN, WOBF	<b>R</b>
08/01/07	SET CONDUCTOR	ENSIGN 12	WOAR	
08/30/07	9 5/8" @ 2364'	ENSIGN 12	WORT	
09/18/07	TD: 2400' Csg. 9 5/8"@ 2364' RURT. NU and test BOPE. PU DS. (			
09/19/07	TD: 3580' Csg. 9 5/8"@ 2364' Drill cmt and FE. Rotary spud @ 0900			
09/20/07	TD: 4880' Csg. 9 5/8"@ 2364' Drill f/ 3580'-4880'. DA @ report time.	MW: 9.2	SD: 9/18/07	DSS: 2
09/21/07	TD: 6035' Csg. 9 5/8"@ 2364' Drill f/ 4880'-6035'. DA @ report time.	MW: 9.8	SD: 9/18/07	DSS: 3
09/24/07	TD: 7340' Csg. 9 5/8"@ 2364' Drill from 6035'-6853'. TFNB. Drill to	MW: 9.8 7784'. TFNB @ report		DSS: 3
09/25/07	TD: 8520' Csg. 9 5/8"@ 2364' Finish bit trip. Drill from 7784'-8520'.	MW: 11.5 DA @ report time.	SD: 9/18/07	DSS: 7
09/26/07	TD: 8980' Csg. 9 5/8"@ 2364' Drill f/ 8520'-8980'. CCH and short trip and pump 12.8 ppg slug and LDDP @	o. CCH w/ 20 bbl gain a	SD: 9/18/07 and 35' flare. Inc	
2212-12-	and the second of the second o			

TD: 8980' Csg. 9 5/8"@ 2364' MW: 11.8 SD: 9/18/07 DSS: 9 LDDS, RU, and run logs to TD. Run and cmt 4.5" prod csg. Prep to set slips @ report time.

09/28/07

09/27/07

TD: 8980' Csg. 9 5/8"@ 2364' MW: 11.8 SD: 9/18/07 DSS: 10 ND, set slips, cut csg, and clean pits. Rls rig @ 1200 hrs on 9/27/07. Move rig @ report time.

#### 11/30/07 MIRIG

Days On Completion: 1

Remarks: 7:AM RIG COMPANY SAFETY MEETING. ROAD RIG TO LOC. RU RIG. ND WELLHEAD. NU BOP. PU 3 7/8" MILL RIH PU 23/8", GOT TO 3860'. POOH W/ TBG & MILL. ND BOP, NU FRAC VALVES. RU DOUBLE JACK. PRES TEST TO 7500 PSI. SWI 4:PM FRAC ON MON.

#### 12/03/07 Standy By

Days On Completion: 4

Remarks: STAND-BY -- WAIT ON HALLIBURTON. PREP TO FRAC IN AM

#### 12/04/07 FRAC

Davs On Completion: 5

Remarks: 5AM [DAY3] MIRU HLBRTN & CUTTERS. HLD HLBRTN J.S.A. DIDN'T START FRACING TILL 2:30 pm DUE TO HALLIBURTON'S PROBLEM (WE WERE ALSO WAITING FOR THEM ON MONDAY). HALLIBURTON COSTS US 1 ½ DAY SO FAR ON THIS WELL).

[STG#1] RIH W/ PERF GUN & PERF THE M.V. @ 8564'-8567', 8620'-8624', 8644'-8646' & 8760'-8762' USING 3-3/8" EXP GUN, 23 GM, 0.36, 90\* PHS, 4 SPF, [44 HHLS] WHP=900# P.T. SURFACE LINES TO 8500#. BRK DN PERFS @ 3142# @ 5 BPM. ISIP=2299, F.G.=.71. PMP'D 3 BBLS 15% HCL AHEAD OF INJ. CALC 22/44 PERFS OPEN. PMP'D 3045 BBLS SLK WTR & 112,600# 30/50 SD W/ 49 GAL SAND WEDGE IN LAST 44,100# SAND. ISIP=2921, F.G.=.78, NPI=622, MP=6875, MR=55, AP=5004, AR=53 BPM.

[STG#2] RIH W/ BAKER 8K CBP & PERF GUN. SET CBP @ 8496'. PERF THE M.V. @ 8236'-8238', 8312'-8316', 8427'-8430' & 8464'-8466' USING 3-3/8" EXP GUN, 23 GM, 0.36, 90\* PHS, 4 SPF, [44 HLS] WHP=470#. BRK DN PERFS @ 3633# @ 6 BPM. ISIP=2929, F.G.=.79, CALC 20/44 PERFS OPEN. PMP'D 1895 BBLS SLK WTR & 70,500# 30/50 SD W/ 31 GAL SAND WEDGE IN LAST 28,600# SAND. ISIP=2947, F.G.=.80, NPI=18, MP=6831, MR=53, AP=5114, AR=50 BPM.

6 PM SWI-SDFN. FREEZE PROTECT W.H. PREP TO FRAC STG'S 3,4,5, & 6 IN AM. NEW HALLIBURTON CREW & EQUIPMENT HAD MAJOR PROBLEMS ALL DAY.

#### 12/05/07 FRAC

Days On Completion: 6

Remarks: 7AM [DAY 4] HLD HLBRTN J.S.A. STG#2-- SICP=2000#.

[STG#3] RIH W/ BAKER 8K CBP & PERF GUN. SET CBP @ 8025'. PERF THE M.V. @ 7831'-7833', 7840'-7842' & 7990'-7995' USING 3-3/8" EXP GUN, 23 GM, 0,36, 90\* PHS, 4 SPF, [36 HLS] WHP=110#. WHP=110#. BRK DN PERFS @ 4129# @ 4 BPM. ISIP=2230, F.G.=.73. CALC 20/36 PERFS OPEN. PMP'D 913 BBLS SLK WTR & 24,200# 30/50 SD W/ 17 GAL SANDWEDGE IN LAST 8800# SAND. ISIP=2475, F.G.=.76, NPI=245, MP=6075, MR=39, AP=4293, AR=36 BPM. [PROBLEMS W/ HLBRTN EQUIPMENT]

[STG#4] 2 HR FREEZE PROBLEM W/ CUTTERS. RIH W/ BAKER 8K CBP & PERF GUN. SET CBP @ 7470'. PERF THE M.V. @ 7257'-7260', 4 SPF, 90\* PHS, 7341'-7343', 4 SPF, 90\* PHS, 7374'-7378', 3 SPF, 120\* PHS & 7437'-7440', 4 SPF, 90\* PHS USING 3-3/8" EXP GUN, 23 GM, 0.36, [44 HLS] WHP=135#. BRK DN PERFS @ 3753 @ 4 BPM. ISIP=1807, F.G.=.69. CALC 26/44 PERFS OPEN. PMP'D 1223 BBLS SLK WTR & 39,600# 30/50 SAND W/ 17 GAL SANDWEDGE IN LAST 15,500# SAND. ISIP=2245, F.G.=.75, NPI=538, MP=5773, MR=49, AP=4381, AR=39 BPM.

[STG#5] RIH W/ BAKER 8K CBP & PERF GUN. SET CBP @ 7052'. PERF THE M.V. @ 7013'-7022' USING 3-3/8" EXP GUN, 23 GM, 0.36, 90\* PHS, 4 SPF, [36 HLS] WHP=150#.BRK DN PERFS @ 5624 @ 3 BPM. ISIP=1630, F.G.=.68. CALC 22/36 PERFS OPEN. PMP'D 1017 BBLS SLK WTR & 33,900# 30/50 SD W/ 18 GAL SANDWEDGE IN LAST 15,300# SAND. ISIP=2280, F.G.=.77, NPI=650, MP=4741, MR=38, AP=3382, AR=34 BPM.

[STG#6] RIH W/ BAKER 8K CBP & PERF GUN. SET CBP @ 6739'. PERF THE WASATCH @ 6678-6681 & 6707'-6714' USING 3-3/8" EXP GUN, 23 GM, 0.36, 90\* PHS, 4 SPF, [40 HLS] WHP=390#. BRK DN PERFS @ 5624# @ 3 BPM. ISIP=895, F.G.=.58. CALC 24/40 PERFS OPEN. PMP'D 541 BBLS SLK WTR & 14,900# 30/50 SD W/ 10 GAL SANDWEDGE IN LAST 4500# SAND. ISIP=2225, F.G.=.78, NPI=1330, MP=4744, MR=41, AP=3024, AR=40 BPM. [HALIBURTON EQUIPMENT HAD MAJOR ISSUES TODAY]

[KILL PLUG] RIH W/ BAKER 8K CBP & SET @ 6570'. POOH & L/D WIRELINE TOOLS. RDMO HLBRTN & CUTTERS. TOTAL 30/50 SD=283,000# & TOTAL FLUID=8634 BBLS.

#### 12/06/07 FRAC

Days On Completion: 6

Remarks: 7AM [DAY 5] J.S.A.#5 ND FRAC VALVES, NUBOP. R/U FLOOR & TBG EQUIPMENT. P/U 3-7/8" BIT, POBS W/ BIG R NIPPLE & RIH ON NEW 2-3/8" J-55 TBG. TAG SD @ 6510'. R/U SWVL & RIG PMP. ESTABLISH CIRCULATION W/ 2% KCL WTR. P.T. BOP TO 3000#. [HELD GOOD] C/O 60' SAND.

[DRLG CBP#1] @ 6570'. DRILL OUT BAKER 8K CBP IN 4 MIN. 30# DIFF. RIH, TAG SD @ 6709'. C/O 30' SD. FCP=0#.

[DRLG CBP#2] @ 6739'. DRILL OUT BAKER 8K CBP IN 4 MIN. 50# DIFF. RIH, TAG SD @ 7022'. C/O 30' SD. FCP=50#.

[DRLG CBP#3] @ 7052'. DRILL OUT BAKER 8K CBP IN 5 MIN. 25# DIFF. RIH, TAG SD @ 7430'.. C/O 40' SD. FCP=75#.

[DRLG CBP#4] @ 7470'. DRILL OUT BAKER 8K CBP IN 5 MIN. 30# DIFF. RIH, TAG SD @ 7995'. C/O 30' SD. FCP=100#.

[DRLG CBP#5] @ 8025'. DRILL OUT BAKER 8K CBP IN 5 MIN. 100# DIFF. RIH, TAG SD @ 8416. C/O 80' SD. FCP=300#.

[DRLG CBP#6] @ 8496'. DRILL OUT BAKER 8K CBP IN 5 MIN. 150# DIFF. RIH, TAG SD @ 8723'. C/O 145' SD TO 8868'. ORIG PBTD @ 8935'.B.P. @ 8762'. CIRCULATE WELL CLN. R/D SWVL. POOH & L/D 40 JTS ON FLOAT. LAND TBG ON HNGR W/ 247 JTS NEW 2-3/8" J-55 TBG.EOT @ 7702.41' & POBS W/ BIG R @ 7700.21'. AVG 5 MIN/PLUG & C/O 415' SAND. R/D FLOOR & TBG EQUIPMENT. FCP=600#. NDBOP, NUWH. DROP BALL DOWN TBG & PUMP OFF THE BIT @ 1600#. WAIT 30 MINUTES FOR BIT TO FALL TO BTM. OPEN WELL TO F.B.T. 0N 20/64 CHOKE. FTP=500#, SICP=1800#. 8:30 PM TURN WELL OVER TO F.B.C. LTR @ 8:30 PM= 7424 BBLS. RACK EQUIPMENT.

**12/07/07 FLOWBACK REPORT:** CP 1825#, TP 425#, CK 20/64", 50 BWPH, LOAD REC'D 550 BBLS, LLTR 6574 BBLS

12/08/07 FLOWBACK REPORT: CP 1900#, TP 1150#, CK 20/64", 33 BWPH, LOAD REC'D 1542 BBLS, LLTR 5582 BBLS
WENT ON SALES: @ 10:30 AM, 1200 MCF, 1075 TBG, 1800 CSG, 20/64 CK, 33 BBWH

**12/09/07 FLOWBACK REPORT:** CP 1900#, TP 1000#, CK 20/64", 25 BWPH, LOAD REC'D 2253 BBLS, LLTR 48471 BBLS

ON SALES: 577 MCF, 0 BC, 782 BW, TP: 1150#, CP: 1900#, 20/64 CHK, 24 HRS, LP: 182#.

12/10/07 FLOWBACK REPORT: CP 1825#, TP 950#, CK 20/64", 18 BWPH, LOAD REC'D 2731 BBLS, LLTR

4393 BBLS

ON SALES: 998 MCF, 0 BC, 432 BW, TP: 950#, CP: 1825#, 20/64 CHK, 24 HRS, LP: 184#.



#### **UNITED STATES** DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED OMB NO. 1004-0137

#### WELL COMPLETION OR RECOMPLETION REPORT AND LOG

Expires: November 30, 2000 5. Lease Serial No.

												1010	<u>)-U I</u>	191-A			
la. Type o	f Well	Oil V	Vell" 🛚 🛚	Gas	☐ Dry	Oth	er					6.	If Ind	ian, Allo	ttee_or	Tribe :	Name -
b. Type of	Completion	1:	Nev	v 🗖	Work Over		Deepen	☐ PI	ug Back	Diff	Resvr.						
			Other	_		_		_		_		7.	Unit c	r CA Ag	<u>şreeme</u>	nt Nan	ne and No.
2.31												UNI	T #8	91008	900/	A NB	U UNIT
2. Name of	•											8.	Lease	Name a	nd We	ll No.	
		OIL & (	SAS ON	ISHORE	LP							NB	U 10	22-5	VI-4T	•	
3. Address	3							3a. Ph	one No. (ir	nclude are	a code)	9.	API V	Vell No.	<del></del>		
				RNAL, U						781-70	24	430	4738	490			
4. Location	of Well (R	eport loca	itions clear	ly and in ac	cordance wi	th Fed	leral requi	irements,	)*						<del></del>		
At surface			CVA	V/SW 52;	VECL 40	אסיר						ł		and Poo		-	ory
At surface			20	V/SVV 52 <sub>1</sub>	FFSL, TO	J/9'F	VVL							T BU.			
At top prod	l. interval re	ported bel	low									11.		T., R., N			<sup>na</sup> <u>, T10S,</u> R22E
• •		•										12.		ty or Par		<u> </u>	13. State
At total de	oth											UIN	TAH				UTAH
14. Date S			15.	Date T.D. R	eached			16. <u>Da</u> t	te Complet	ed_		17.	Eleva	tions (D	F, RK	B, RT,	
08/01/0	7		09/	27/07					D&A	X Rea	dy to Prod.	517	7'GL				
								12/08			1::	1					
18. Total I		D VD	8980'	119. P	lug Back T.		MD	8935	•		20. Depth	Bridge	e Plug				
21 Trme I			omical I ca	s Run (Subr	.i		TVD			laa 111	<u> </u>	. M		TV			
21. Type i	ciecuic & O	ther Meci	iamicai Log	s Kun (Subi	пи сору от е	acn)					s well cored s DST run?			Yes			
CDL CC	Y CD	Nr.WA	_ ^	CN	(D)	30.1	Cons	_			ectional Sur	_				ini cop Submit	
				CNI		المك	HAM				Chonai Sui	vcy: •	140		1 65 (3	Judilli	сору)
23. Casing	and Liner I	Record (A	keport all s	trings set in	well)	—Т	54 C-		NT C	· C1 0-	l cs				<del></del>		
Hole Size	Size/Grade	Wt. (#.	/ft.) 1	Top (MD)	Bottom (1	MD)	Stage Ce Dep			Sks. & Cement	Slurry V (BBL)		Cem	ent Top'	•	Am	ount Pulled
20"	14"	36.7	7#	<del></del>	40'		Дер	пı		SX	(DBL)	<del>'</del>			$\dashv$		
12 1/4"	9 5/8"	32.3#			2400	<del>,  </del>				SX					$\dashv$		
7 7/8"	4 1/2"	11.6			8980					5 SX					$\dashv$		
1 110	4 1/2	11.0	<del>/#</del>		0900	<del>'</del> -			17 13	3 3 1	-						
24. Tubing	Record	<u> </u>	·						<u> </u>	····	1						
Size	Depth Se	et (MD)	Packer D	epth (MD)	Size		Depth Se	t (MD)	Packer De	enth (MD)	Siz	· · · · · · · · · · · · · · · · · · ·	TD	epth Set	(MD)	Pa	ker Set (MD)
2 3/8"	770		T ducker 2	opu. (1/25)	5120		Ворин во	· (NED)	T death D	opin (MD)	1 0.2		+-	орыг осс	(IVID)	+	ERCI DEI (IVID)
	<del>                                     </del>		<u> </u>								<del>                                     </del>		+				
25. Produc	ing Interval	s	<u> </u>			$\dashv$	26. Perfo	ration R	ecord		.J						
	Formatio		T	Тор	Botton	<u>.                                      </u>	Per	forated 1	Interval	$\top$	Size	No	. Hole	s		Perf. S	Status
4)	WASAT	CH ·		6678'	6714			678'-6			0.36		40			OP	
	ESAVE			7013'	8762			013'-8		_	0.36	<u> </u>	204	_		OP	
C)					0.02	<del>`</del>	•	<del></del>			0.00					<u> </u>	
D)	·-·					$\dashv$					<del></del>						
	racture, Tre	atment C	ement Sau	eeze Etc	Ļ							<u> </u>	DE	CFI	VE	<del>D</del>	
	Depth Inter		1			<del></del>	· · · · · · · · · · · · · · · · · · ·		Amount an	nd type of	Material	;	<u>`</u> □	<u> </u>			
	3678'-67		PM	P 541 BE	RIS SI IC	K H	2O & 1				- Internal		1.4	N O 8	R 20	<del>08 -</del>	
	7013'-87			P 8093 E								·		114 0 1	,		
	010 01	<u> </u>	- 1.4.	1 0000 E	DLO OL	0.(1	120 0	200, 10	<del>50# 50/</del>	00 OD				OIL, G	AC &	MININ	iG
,				<del>-</del>								<del>- Dl</del>	1. OF	OIL, G	40 u	14111411	
28 Produc	tion - Interv	al A															
Date First	Test	Hours	Test	Oil	Gas	Water		Oil Grav	itv	Gas		Produc	tion Me	thod			
Produced	Date	Tested	Production	1	MCF	BBL		Corr. AP	•	Gravity			uon m	Mou			
12/08/07	12/10/07	24	$\rightarrow$	0	998	4	432						FL	ows	FRC	M W	'ELL
Choke		Csg.	24 Нг.	Oil	Gas	Water		Oil Grav	-	Well Statu	S						
Size		Press.	Rate	BBL	MCF	BBL	122	Corr. AP	I	1	D.	ים	1011	~ ~ *	O 147	-, ,	
	SI	1825#	<del></del>	0	998		132	<u> </u>		<u> </u>	Ph	נטטנ	CIN	G GAS	o VVE	-LL	
	ction - Inter		I <del>T</del>	lon	la :	117		010	•	Io.		In ·					
Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL		Oil Grave Corr. AP	-	Gas Gravity		Produc	tion Me	mod			
12/08/07	12/10/07	24		0	998		132		-	,			FI	ows	FRC	M W	FH
Choke	Tbg. Press.	Csg.	24 Hr.	Oil	Gas	Water		Oil Grav	ity	Well Statu	<u> </u>		<u> </u>	2		V V	
Size		Press.	Rate	BBL	MCF	BBL		Corr. AP	-								
20/64	SI	1825#	$\longrightarrow$	0	998		132				PR	<u> OD</u> L	<u>ICIN</u>	G GAS	3 WE	ELL	

	28b. Production - Interval C									
Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method	
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas : Oil Ratio	Well Status		
28c. Production - Interval D										
Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method	
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas : Oil Ratio	Well Status	<b></b>	
SOLD	29. Disposition of Gas (Sold. used for fuel. vented. etc.) SOLD									
30. Summary of Porous Zones (Include Aquifers): Show all important zones of porosity and contents thereof: Cored intervals and all drill-tests, including depth interval tested, cushion used, time tool open, flowing and shut-in prand recoveries.								31. Formatio	on (Log) Markers	<b>,</b>
For	mation	Тор	Bottom		Descri	ptions, Conten	ts, etc.		Name	Top Meas. Depth
	VERDE	4455' 7008'	7008'							
32. Additional remarks (include plugging procedure):  33. Circle enclosed attachments:										
1. E	ectrical/Meci andry Notice	hanical Log				Geologic Rep Core Analysi		ST Report ther:	4. Directional Survey	
	by certify tha				nation is com	plete and corre	ect as determined i		records (see attached instr	
Name Signa		2	uh	M	nll	10		01/02/08	- AND ADMIN OF E	
Title 18 U	itle 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United									

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.



#### **UNITED STATES** DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED OMB NO. 1004-0137

#### WELL COMPLETION OR RECOMPLETION REPORT AND LOG

Expires: November 30, 2000 5. Lease Serial No.

												1010	<u>)-U I</u>	191-A			
la. Type o	f Well	Oil V	Vell" 🛚 🛚	Gas	☐ Dry	Oth	er					6.	If Ind	ian, Allo	ttee_or	Tribe :	Name -
b. Type of	Completion	1:	Nev	v 🗖	Work Over		Deepen	☐ PI	ug Back	Diff	Resvr.						
			Other	_		_		_		_		7.	Unit c	r CA Ag	<u>şreeme</u>	nt Nan	ne and No.
2.31												UNI	T #8	91008	900/	A NB	U UNIT
2. Name of	•											8.	Lease	Name a	nd We	ll No.	
		OIL & (	SAS ON	ISHORE	LP							NB	U 10	22-5	VI-4T	•	
3. Address	3							3a. Ph	one No. (ir	nclude are	a code)	9.	API V	Vell No.	<del></del>		
				RNAL, U						781-70	24	430	4738	490			
4. Location	of Well (R	eport loca	itions clear	ly and in ac	cordance wi	th Fed	leral requi	irements,	)*						<del></del>		
At surface			CVA	V/SW 52;	VECL 40	אסיר						ł		and Poo		-	ory
At surface			20	V/SVV 52 <sub>1</sub>	FFSL, TO	J/9'F	VVL							T BU.			
At top prod	l. interval re	ported bel	low									11.		T., R., N			<sup>na</sup> <u>, T10S,</u> R22E
• •		•										12.		ty or Par		<u> </u>	13. State
At total de	oth											UIN	TAH				UTAH
14. Date S			15.	Date T.D. R	eached			16. <u>Da</u> t	te Complet	ed_		17.	Eleva	tions (D	F, RK	B, RT,	
08/01/0	7		09/	27/07					D&A	X Rea	dy to Prod.	517	7'GL				
								12/08			1::	1					
18. Total I		D VD	8980'	119. P	lug Back T.		MD	8935	•		20. Depth	Bridge	e Plug				
21 Trme I			omical I ca	s Run (Subr	.i		TVD			laa 111	<u> </u>	. M		TV			
21. Type i	ciecuic & O	ther Meci	iamicai Log	s Kun (Subi	пи сору от е	acn)					s well cored s DST run?			Yes			
CDL CC	Y CD	Nr.WA	_ ^	CN	(D)	30.1	Cons	_			ectional Sur	_				ini cop Submit	
				CNI		المك	HAM				Chonai Sui	vcy: •	140		1 65 (3	Judilli	сору)
23. Casing	and Liner I	Record (A	keport all s	trings set in	well)	—Т	54 C-		NT C	· C1 0-	l c1				<del></del>		
Hole Size	Size/Grade	Wt. (#.	/ft.) 1	Top (MD)	Bottom (1	MD)	Stage Ce Dep			Sks. & Cement	Slurry V (BBL)		Cem	ent Top'	•	Am	ount Pulled
20"	14"	36.7	7#	<del></del>	40'		Дер	пı		SX	(DBL)	<del>'</del>			$\dashv$		
12 1/4"	9 5/8"	32.3#			2400	<del>,  </del>				SX					$\dashv$		
7 7/8"	4 1/2"	11.6			8980					5 SX					$\dashv$		
1 110	4 1/2	11.0	<del>/#</del>		0900	<del>' </del> -			17 13	3 3 1	-				-+		
24. Tubing	Record	<u> </u>	·						<u> </u>	····	1						
Size	Depth Se	et (MD)	Packer D	epth (MD)	Size		Depth Se	t (MD)	Packer De	enth (MD)	Siz	· · · · · · · · · · · · · · · · · · ·	TD	epth Set	(MD)	Pa	ker Set (MD)
2 3/8"	770		T ducker 2	opu. (1/25)	5120		Ворин во	· (NED)	T death D	opin (MD)	1 0.2		+-	орыг осс	(IVID)	+	ERCI DEI (IVID)
	<del>                                     </del>		<u> </u>								<del>                                     </del>		+				
25. Produc	ing Interval	s	<u> </u>			$\dashv$	26. Perfo	ration R	ecord		.J						
	Formatio		T	Тор	Botton	<u>.                                      </u>	Per	forated 1	Interval	$\top$	Size	No	. Hole	s		Perf. S	Status
4)	WASAT	CH ·		6678'	6714			678'-6			0.36		40			OP	
	ESAVE			7013'	8762			013'-8		_	0.36	<u> </u>	204	_		OP	
C)					0.02	<del>`</del>	•	<del></del>			0.00	t				<u> </u>	
D)	·-·					$\dashv$					<del></del>						
	racture, Tre	atment C	ement Sau	eeze Etc	Ļ							<u> </u>	DE	CFI	VE	<del>D</del>	
	Depth Inter		1			<del></del>	· · · · · · · · · · · · · · · · · · ·		Amount an	nd type of	Material	;	<u>`</u> □	<u> </u>			
	3678'-67		PM	P 541 BE	RIS SI IC	K H	2O & 1				- Internal		1.4	N O 8	R 20	<del>08 -</del>	
	7013'-87			P 8093 E								·		114 0 1	,		
	010 01	<u> </u>	- 1.4.	1 0000 E	DLO OL	0.(1	120 0	200, 10	<del>50# 50/</del>	00 OD				OIL, G	AC &	MININ	iG
,				<del>-</del>								<del>- Dl</del>	1. OF	OIL, G	43 U	14111411	
28 Produc	tion - Interv	al A															
Date First	Test	Hours	Test	Oil	Gas	Water		Oil Grav	itv	Gas		Produc	tion Me	thod			
Produced	Date	Tested	Production	1	MCF	BBL		Corr. AP	•	Gravity			uon m	Mou			
12/08/07	12/10/07	24	$\rightarrow$	0	998	4	432						FL	ows	FRC	M W	'ELL
Choke		Csg.	24 Нг.	Oil	Gas	Water		Oil Grav	-	Well Statu	S						
Size		Press.	Rate	BBL	MCF	BBL	122	Corr. AP	I	1	D.	ים	1011	~ ~ *	O 147	-, ,	
	SI	1825#	<del></del>	0	998		132	<u> </u>		<u> </u>	Ph	נטטנ	CIN	G GAS	o VVE	-LL	
	ction - Inter		I <del>T</del>	lon	la :	117		010	•	Io.		In ·					
Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL		Oil Grave Corr. AP	-	Gas Gravity		Produc	tion Me	mod			
12/08/07	12/10/07	24		0	998		132		-	,			FI	ows	FRC	M W	FH
Choke	Tbg. Press.	Csg.	24 Hr.	Oil	Gas	Water		Oil Grav	ity	Well Statu	<u> </u>		<u> </u>	2		V V	
Size		Press.	Rate	BBL	MCF	BBL		Corr. AP	-								
20/64	SI	1825#	$\longrightarrow$	0	998		132				PR	<u> OD</u> L	<u>ICIN</u>	G GAS	3 WE	ELL	

	28b. Production - Interval C									
Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method	
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas : Oil Ratio	Well Status		
28c. Production - Interval D										
Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method	
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas : Oil Ratio	Well Status	<b></b>	
SOLD	29. Disposition of Gas (Sold. used for fuel. vented. etc.) SOLD									
30. Summary of Porous Zones (Include Aquifers): Show all important zones of porosity and contents thereof: Cored intervals and all drill-tests, including depth interval tested, cushion used, time tool open, flowing and shut-in prand recoveries.								31. Formatio	on (Log) Markers	<b>,</b>
For	mation	Тор	Bottom		Descri	ptions, Conten	ts, etc.		Name	Top Meas. Depth
	VERDE	4455' 7008'	7008'							
32. Additional remarks (include plugging procedure):  33. Circle enclosed attachments:										
1. E	ectrical/Meci andry Notice	hanical Log				Geologic Rep Core Analysi		ST Report ther:	4. Directional Survey	
	by certify tha				nation is com	plete and corre	ect as determined i		records (see attached instr	
Name Signa		2	uh	M	nll	10		01/02/08	- AND ADMIN OF E	
Title 18 U	itle 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United									

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

	STATE OF UTAH							
	DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MININ	NG	5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-01191-A					
SUND	RY NOTICES AND REPORTS O	N WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:					
Do not use this form for proposition-hole depth, reenter plu DRILL form for such proposals.		7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES						
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: NBU 1022-5M-4T							
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONS	HORE, L.P.		9. API NUMBER: 43047384900000					
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th S	PHONI treet, Suite 600, Denver, CO, 80217 3779	E NUMBER: 720 929-6007 Ext	9. FIELD and POOL or WILDCAT: NATURAL BUTTES					
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0526 FSL 1079 FWL QTR/QTR, SECTION, TOWNSHI Otr/Otr: SWSW Section: 05	(P, RANGE, MERIDIAN: 5 Township: 10.0S Range: 22.0E Meridian: S		COUNTY: UINTAH  STATE: UTAH					
11.								
CHE	CK APPROPRIATE BOXES TO INDICATE	NATURE OF NOTICE, REPORT,	OR OTHER DATA					
TYPE OF SUBMISSION		TYPE OF ACTION						
	☐ ACIDIZE ☐	ALTER CASING	☐ CASING REPAIR					
NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME					
	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE					
✓ SUBSEQUENT REPORT Date of Work Completion:	DEEPEN	FRACTURE TREAT	■ NEW CONSTRUCTION					
1/14/2010	OPERATOR CHANGE	PLUG AND ABANDON	PLUG BACK					
SPUD REPORT	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION					
Date of Spud:	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON					
	☐ TUBING REPAIR	VENT OR FLARE	WATER DISPOSAL					
DRILLING REPORT Report Date:	☐ WATER SHUTOFF	SI TA STATUS EXTENSION	APD EXTENSION					
	☐ WILDCAT WELL DETERMINATION ✓	OTHER	OTHER: WORKOVER					
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.  THE OPERATOR RECENTLY CONCLUDED WORKOVER OPERATIONS ON THIS  WELL ON 1/14/2010. WORKOVER OPERATIONS CONSISTED OF THE Accepted by the  INSTALLATION OF A PACKER. PLEASE SEE ATTACHED CHRONOLOGICAL Utah Division of  WELL HISTORY FOR WORKOVER OPERATION DEATAILS FOR THIS WELLOII, Gas and Mining  FOR RECAPIL 20, 2010								
NAME (PLEASE PRINT) Andy Lytle	<b>PHONE NUMBER</b> 720 929-6100	TITLE Regulatory Analyst						
SIGNATURE N/A		<b>DATE</b> 4/20/2010						

#### **US ROCKIES REGION Operation Summary Report** Well: NBU 1022-5M-4T Spud Date: 9/18/2007 Project: UTAH-UINTAH Site: NBU 1022-5M-4T Rig Name No: LEED 733/733 **Event: WELL WORK EXPENSE** Start Date: 1/12/2010 End Date: 1/14/2010 Active Datum: RKB @5,190.99ft (above Mean Sea Leve UWI: NBU 1022-5M-4T Code P/U Date Phase MD From Operation Time Duration Sub Start-End Code (hr) (ft) 1/12/2010 6:45 - 7:00 0.25 WO/REP 48 Ρ JSA- RDSU, ROAD RIG. 7:00 - 14:00 7.00 WO/REP 30 Р Α RDSU FROM NBU 922-29M3CS. ROAD RIG TO LOCATION, OPEN WELL TO PROD TANKS, RUSU. SPOT EQUIP. PMP 30 BBLS DOWN TBG. ND WH. NU BOP. RU FLOOR AND TBG EQUIP. 14:00 - 18:30 4.50 WO/REP 31 UNLAND 248-JTS 2-3/8" J-55 TBG FROM 7728', LUB 1 OUT AND LD 4" 10K HANGER. PU 33 JTS TO TAG FILL AT 8756' W/ 281-JTS IN. POOH AS LD 33 JTS AND SB 90 JTS. SDFN. DRAIN EQUIP. 159 JTS IN, EOT AT 4943'. 1/13/2010 6:45 - 7:00 0.25 WO/REP 48 JSA-7:00 - 18:00 11.00 WO/REP 31 Ρ SITP 1200, SICP 1200. OPEN CSG TO FBT. PMP 15 BBLS TMAC DOWN TBG. CONT POOH W/ PROD TBG. 248-JTS OUT. NOTE--NO SCALE IN TBG ID. HAD HEAVY SCALE IN AREAS ON TBG OD AT 6470' TO EOT, FOUND HOLE IN TBG AT 7070', REPLACED 41-JTS. MU NOTCHED 1.87" XN NIPPLE AS BROACHING TBG W/ 1.92" BROACH. RAN 59-JTS, 4-1/2" MODEL R-3 PKR, 149-JTS 2-3/8" J-55 TBG IN. LOST AIR ON RIG. INVESTIGATE FOR FROZEN LINES. POSSABLY LOST AIR COMPRESSOR. SDFN W/ PKR AT 4633', EOT AT 6469'. 1/14/2010 6:45 - 7:00 0.25 WO/REP 48 JSA- SETTING PKR. 7:00 - 9:00 2.00 WO/REP 46 Е THAW OUT AIRLINES ON RIG. N/C 9:00 - 13:30 4.50 Τ Ρ WO/REP 31 SITP 650, SICP 1150. OPEN CSG TO FBT. BLEED OFF TBG. PMP 15 BBLS DOWN TBG. CONT RIH AS PU 40-JTS TBG. PU 4" 10K HANGER. PMP 30 BBLS DOWN CSG. SET 4-1/2" R-3 PKR. LAND HANGER W/ 189-JTS 2-3/8" J-55 TBG, 4-1/2" R-3 PKR (ELEM) SET AT 5925.11, 59-JTS 2-3/8" J-55 TBG, NOTCHED 1.87" XN NIPPLE W/ EOT AT 7760.27. PMP 10 BBLS DOWN TBG. RD FLOOR. ND BOP. NU WH. RACK OUT EQUIP. RDSU AND MO. LEFT WELL SHUT IN. TURN OVER TO PRODUCTION. TBG DETAIL 14.00 KR 4" 10K HANGER .83 15K COMPRESSION -2.30189-JTS 2-3/8" J-55 5910.37 4-1/2" WFORD R-3 PKR 7.12 59-JTS 2-3/8" J-55 1829.20 PKR AT 5925.11 EOT AT 7760.27 TOT PMP 270 BBLS, TOT RCVR 425 BBLS

	STATE OF UTAH		FORM 9			
	DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	3	5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-01191-A			
SUNDF	RY NOTICES AND REPORTS ON	I WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:			
	sals to drill new wells, significantly deepen exist igged wells, or to drill horizontal laterals. Use A		7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES			
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: NBU 1022-5M-4T					
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONS	HORE, L.P.		<b>9. API NUMBER:</b> 43047384900000			
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th S	PHONE Notes, Suite 600, Denver, CO, 80217 3779	UMBER: 720 929-6007 Ext	9. FIELD and POOL or WILDCAT: NATURAL BUTTES			
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0526 FSL 1079 FWL			COUNTY: UINTAH			
QTR/QTR, SECTION, TOWNSHI Qtr/Qtr: SWSW Section: 05	IP, RANGE, MERIDIAN: 5 Township: 10.0S Range: 22.0E Meridian: S		STATE: UTAH			
11. CHE	CK APPROPRIATE BOXES TO INDICATE N.	ATURE OF NOTICE, REPORT,	OR OTHER DATA			
TYPE OF SUBMISSION		TYPE OF ACTION				
THE OPERATOR REQ WELL. PROPOSED A	CHANGE TO PREVIOUS PLANS  CHANGE WELL STATUS  DEEPEN  OPERATOR CHANGE  PRODUCTION START OR RESUME  REPERFORATE CURRENT FORMATION  TUBING REPAIR  WATER SHUTOFF	RKOVER THE SUBJECT CEMENT SQUEEZE OF N SQUEEZE PROCEDUR	Accepted by the E. Utah Division of Oil, Gas and Mining ate: August 26, 2010			
NAME (PLEASE PRINT) Andy Lytle	PHONE NUMBER	TITLE Regulatory Analyst				
SIGNATURE N/A	720 929-6100	DATE 8/25/2010				



## **NBU 1022-5M-4T**

REMOVE PACKER &
CEMENT SQUEEZE

GREATER NATURAL BUTTES
SECTION 05 T10S R22E
43-047-38519
UINTAH, UT
WI: 100.00%

NRI: 81.20%

PREPARED BY: TRAVIS HANSELL



### **CONTACT INFORMATION**

FOREMAN	DALE JENKINS	435 828 4043
LEAD MECHANICAL	RANDY BROTHERSON	435 828 8205
OPTIMIZER	TREVOR HOOPES	435 828 8916
OPERATOR	GERALD NEBEKER	435 828 1087
RELIEF OPERATOR	COLTON COX	435 828 6505
ENGINEER	TRAVIS HANSELL	435 790 6903



#### **DEPTHS & TUBULARS**

**ELEVATIONS:** 5177 GL 5191 KB

**TOTAL DEPTH:** 8980 **PBTD:** 8935

 SURFACE CASING:
 9 5/8", 36# J-55 ST&C @ 2364'

 PRODUCTION CASING:
 4 1/2", 11.6#, I-80 LT&C @ 8980'

Marker Joint **4509-4526**'

#### **TUBULAR PROPERTIES:**

	BURST	COLLAPSE	DRIFT DIA.	CAPACITIES	
	(psi)	(psi)	(in.)	(bbl/ft)	(gal/ft)
2 3/8" 4.7# J-55	7,700	8,100	1.901"	0.00387	0.1624
tbg					
4 ½" 11.6# I-80	7780	6350	3.875"	0.0155	0.6528
(See above)					
2 3/8" by 4 ½"				0.0101	0.4227
Annulus					



#### **HISTORY**

- Last consistent monthly production was 250MCFD.
- Recompleted in Wasatch 11/2008.
- Swabbed well for ~30 days attempting to recover frac water.
- Drilled up FTBP 2/2009.
- Recovered total flowback water (7422 BBL) 2/21/2009.
- No consistent production since recompletion.
- Installed packer 01/14/2010
- Recent production has been 180MCFD. Increased EUR from 126MM to 880MM



### **PERFORATIONS**

PBTD OLD POBS AT 8810'

MD Top (ft)	MD Base (ft)	Shot Density (shot/ft)
5,224.0	5,228.0	4.00
5,342.0	5,348.0	4.00
5,590.0	5,600.0	4.00
5,846.0	5,850.0	4.00
5,894.0	5,900.0	4.00
PACKER SET AT	5925'	
6 679 0	6,681.0	4.00
6,678.0 6,678.0	6,681.0	4.00
6,707.0	6,714.0	4.00
6,707.0	6,714.0	4.00
7,013.0	7,022.0	4.00
7,013.0	7,260.0	4.00
7,341.0	7,200.0	4.00
7,374.0	7,378.0	3.00
7,437.0	7,440.0	4.00
7,437.0	7,440.0	4.00
EOT SET AT 770	60 <b>'</b>	
7,831.0	7,833.0	4.00
7,840.0	7,842.0	4.00
7,990.0	7,995.0	4.00
8,236.0	8,238.0	4.00
8,312.0	8,316.0	4.00
8,427.0	8,430.0	4.00
8,464.0	8,466.0	4.00
8,564.0	8,567.0	4.00
8,620.0	8,624.0	4.00
8,644.0	8,646.0	4.00
TAG FILL AT 87	56′	
8,760.0	8,762.0	4.00
5,700.0	5,7 02.0	1.00



#### **PROCEDURE**

#### **Notes**

In case packer is stuck, have free-point and fishing services available to the operation.

#### **Procedure Outline**

- MIRU. N/D WH and N/U BOP.
- Release 4.5" Model R-3 Packer @ 5925'.
- POOH, inspect & scan tubing. Scan Tech is preferred.
- Set cast iron bridge plug at +/-5920'
- RIH w/ 2-3/8" J-55 tubing to **5900'**
- Establish injection rate. Contact Travis Hansell and Brad Laney with results. Percent excess cement will depend on pressure and injection rate test.
- Volume in **676'** of 11.6#, 4.5" casing is 10.5 bbl, 59.0 cuft, or **51sx (1.15 cuft / sack)**
- RU cementers and pump recommended Class G cement volume across perforations:

5224-5228

5342-5348

5590-5600

5846-5850

5894-5900

- POOH to at least 1 joint above estimated top of cement, reverse circulate tubing clean
- Shut in tubing & squeeze down casing, TOOH
- RIH w/ 3-7/8" drill bit, drill out cement to CIBP @ 5920', pressure test to 1500psi
- Repeat squeeze if pressure test fails
- Clean out to PBTD 8810' (bottom perf is @ 8762'), TOOH
- RIH w/ 2-3/8" J-55 tubing & seat nipple. Land tubing @ 7764'.
- N/D BOP, N/U WH, RDMO.

	FORM 9							
	5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-01191-A							
SUNDF	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:							
Do not use this form for proposition-hole depth, reenter plu DRILL form for such proposals.	7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES							
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: NBU 1022-5M-4T							
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONS	<b>9. API NUMBER:</b> 43047384900000							
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th S	9. FIELD and POOL or WILDCAT: NATURAL BUTTES							
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0526 FSL 1079 FWL	COUNTY: UINTAH							
QTR/QTR, SECTION, TOWNSHI Qtr/Qtr: SWSW Section: 05	STATE: UTAH							
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA								
TYPE OF SUBMISSION	TYPE OF ACTION							
	□ ACIDIZE □	ALTER CASING	☐ CASING REPAIR					
NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME					
✓ SUBSEQUENT REPORT	☐ CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE					
Date of Work Completion:	DEEPEN	FRACTURE TREAT	☐ NEW CONSTRUCTION					
11/0/2010	☐ OPERATOR CHANGE	PLUG AND ABANDON	☐ PLUG BACK					
SPUD REPORT Date of Spud:	☐ PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION					
	☐ REPERFORATE CURRENT FORMATION ☐	SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON					
DRILLING REPORT	U TUBING REPAIR  WATER SHUTOFF	VENT OR FLARE	☐ WATER DISPOSAL					
Report Date:		SI TA STATUS EXTENSION	APD EXTENSION					
	☐ WILDCAT WELL DETERMINATION ✓	OTHER	OTHER: PERF SQUEEZE					
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.  The Operator has concluded workover operations on the subject well location on 11/8/2010. Workover operations consisted of perforation squeeze workAccepted by the (5224'-5900'). EOT is at 7772'. Please see attached chronological well historytah Division of Oil, Gas and Mining FOR RECORD ONLY.  TOTAL PROPERTY OF THE PRINT OF THE PROPERTY O								
NAME (PLEASE PRINT) Andy Lytle	<b>PHONE NUMBER</b> 720 929-6100	TITLE Regulatory Analyst						
SIGNATURE N/A		<b>DATE</b> 11/10/2010						

US ROCKIES REGION											
Operation Summary Report											
Well: NBU 1022-5M-4T Spud Date: 9/18/2007											
Project: UTAH-UINTAH Site:			Site: NBI	: NBU 1022-5M-4T				Rig Name No: GWS 1/1			
Event: WELL WORK EXPENSE St.		Start Dat	Start Date: 10/19/2010				End Date: 11/8/2010				
Active Datum: RKB @5,190.99ft (above Mean S			Sea Leve	ea Leve UWI: NBU 1022-5M-4T							
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation			
10/21/2010	12:00 - 17:00	5.00	MAINT	30	A	Р		MIRU, TBG & CSG PRESS 70 PSI BLEED WELL DOWN & KILL W/ 20 BBLS DOWN TBG, ND WH, NU BOPS & TEST TO 3,000 PSI, RU FLOOR & TBG EQUIP, UNLAND TBG & TRY TO RELEASE R3 PKR STUCK PUMPED 20 BBLS DOWN TBG WHILE WORKING UP & DOWN PULLED 15K OVER LET SET OVERNIGHT, SWI, SDFN.			
10/22/2010	7:00 - 7:15	0.25	MAINT	48		Р		HSM, WORKING PIPE WATCH FOR FALLING OBJECTS OUT OF DERRICK.			
	7:15 - 17:00	9.75	MAINT	31	В	Р		TBG PRESS 350 PSI, CSG PRESS 800 PSI, BLEED CSG DOWN & KILL W/ 5 BBLS, WORK PIPE W/ PRESS STILL ON TBG, BLEED TBG PRESS OFF WHILE WORKING PIPE, R3 PKR CAME FREE, MIRU SCAN TECH POOH SCANNING TBG SCANNED 248 JTS 159 GOOD 89 BAD COLLARS TUBES & NO DRIFT RDMO SCAN TECH, MIRU CUTTERS RIH W/ 10K CBP SET @ 5,920' POOH PU CMT RETRAINER RIH SET @ 5,486' POOH RDMO CUTTERS, SWI, SDFWE.			
10/25/2010	7:00 - 7:15	0.25	MAINT	48		Р		HSM, SQUEEZING CEMENTING & PRESSURE.			
10/26/2010	7:15 - 16:00	8.75	MAINT	51	A	P		CSG PRESS 0 PSI, RIH W/ TBG & CMT STINGER TO SQUEEZE CMT FROM, CMT RETAINER @ 5,486' TO 10K CBP @ 5,920', PERFORATION COVERAGE 5,590'-5,600' / 5,846'-5,850' / 5,894'-5,900', INJECTION RATE 3.5 BPM @ 700 PSI PUMPED 50 SKS W/ 2% CALCIUM CLORIDE FOLLOWED W/ 50 SKS NEAT CMT START DISPLACEMENT FEATHERING IN LAST 7 BBLS WELL ON VACUMN, 2ND SQUEEZE INJ RATE 1.5 BPM @ 950 PSI PRESS STABLIZED @ 500 PSI, MIX & PUMP 50 SKS NEAT CMT FEATHER IN LAST 5 BBLS 500 PSI, UNSTING FROM CMT RETAINER REVERSE CIRC W/ PARTIAL RETURNS L/D 4 JTS EOT @ 5,371', MIX & PUMP 50 SK BALANCE PLUG TO COVER PERFORATIONS 5,224'-28', 5,342'-48', PARTIAL RETURNS THRU OUT JOB DISPLACECMT W/ 16.9 BBLS TMAC, L/D 30 JTS TO 4,426', SHUT RAMS START SQUEEZING CMT PUMPING DOWN TBG PUMPED 3 BBLS PRESS UP TO 1,800 PSI, TOC @ 4,984', REVERSE CIRC W/ 35 BBLS, RDMO PRO PETRO, WAIT ON CMT, SWI SDFN.			
10/26/2010	7:00 - 7:15	0.25	MAINT	48		Р		HSM, LAYERED CLOTHING FOR COLD WEATHER			
	7:15 - 11:00	3.75	MAINT	31	I	Р		POOH, PU BIT TIH TAG CMT @ 5,040', RU POWER SWIVEL START DRLG CMT FROM 5,040'. C/O MASTER VALVE ON WH.			
	11:00 - 16:00	5.00	MAINT	44	A	Р		DRLG CMT FROM 5,040' TO 5,376', CIRC HOLE CLEAN, PRESS TEST TO 1,500 PSI BLED OFF TO 0 PSI IN 2 MINUTES, CHECKED ALL SURFACE EQUIP NO LEAKS ON SURFACE, PRESSURED UP TO 1,500 PSI AGAIN INJECTING 1 BPM INTO FORMATION WILL RESQUEEZE IN AM, SWI, SDFN.			
10/27/2010	7:00 - 7:15	0.25	MAINT	48		Р		HSM, SQUEEZING CMT & PRESSURE.			

#### **US ROCKIES REGION Operation Summary Report** Spud Date: 9/18/2007 Well: NBU 1022-5M-4T Site: NBU 1022-5M-4T Project: UTAH-UINTAH Rig Name No: GWS 1/1 **Event: WELL WORK EXPENSE** Start Date: 10/19/2010 End Date: 11/8/2010 Active Datum: RKB @5,190.99ft (above Mean Sea Leve UWI: NBU 1022-5M-4T Date P/U Phase Code MD From Operation Time Duration Sub Start-End Code (hr) (ft) 7:15 CSG PRESS 0 PSI WELL ON VACUMN, TRY TO - 15:00 7.75 MAINT 51 Α Р ESTABLISH INJECTION RATE & PRESS NO LUCK, CIRC TMAC ACROSS PERFS @ 5.224'-28'. 5,342'-48', PRESS UP TO 2,000 PSI AFTER 5 MINUTES PRESS FELL TO 500 PSI W/ 1/4 BBL TO PRESS BACK UP TO 2,000 PSI AFTER 5 MINUTES PRESS FELL TO 490 PSI KEPT PRESS UP 1,500 TO 2,000 PSI FOR 1 HOUR ENGINEERS REQUEST TO BREAK DOWN, FINAL GOT INJECT RATE OF .2 BPM PRESS 2,500 PSI, POOH TO 5,064', 160' ABOVE TOP PERF @ 5,224', MIX 20 SKS NEAT CLASS G CMT, PUMP 5 BBLS FRESH, 20SKS CMT 4.1 BBLS HOLDING 600 PSI BACK PRESS TILL CMT @ EOT THEN SHUT BACK SIDE IN, DISPLACE W/ 20.5 BBLS PRESS UP TO 3,000 PSI, POOH 3 STDS 189', REVERSE CIRC NO CMT JUST A LITTLE GRAY WATER, DISPLACE W/ 3/4 BBL PRESS UP TO 2,600 PSI MAY HAVE GOT 1/2 -3/4 BBL TO BTM PERFS, SWI W/ 2,600 PSI, WAIT ON CMT TILL MOURNING & DRILL OUT, SDFN. 7:00 - 7:15 HSM, ICE PLUG AS WEATHER GOES BELOW 10/28/2010 0.25 **MAINT** 48 Ρ FRFF7ING. 7:15 - 14:00 6.75 MAINT Ρ CSG PRESS 2.500 PSI HELD ON CMT 44 Α OVERNIGHT, TIH TAG CMT @ 5,050', DRLG CMT FROM 5,050' TO 5,100' CMT SOFT, DRLG CMT FROM 5,100' TO 5,355' CMT MED-HARD, PRESS TEST SQUEEZE TO 1,625 PSI FOR 10 MINUTES HELD OKAY, START DRLG CMT RETAINER BIT FAILED PREP TO POOH FOR NEW BIT. 14:00 - 16:30 2.50 **MAINT** 31 Р POOH FOR NEW BIT, TIH, SWI, SDFN. 10/29/2010 7:00 - 7:15 0.25 MAINT 48 Ρ HSM, LOOSE CLOTHING AROUND MOVING EQUIPMENT. 7:15 - 17:00 9.75 **MAINT** 44 R Р CSG PRESS 0 PSI, DRLG CMT RETAINER @ 5,486' & CMT FROM 5,488' TO 5,710' CIRC HOLE CLEAN, DRAIN EQUIP, SWI, RESUME DRLG CMT ON MONDAY, SDFWE. 11/1/2010 7:00 - 7:15 0.25 **MAINT** Р HSM, INSPECTING DRLG EQUIP. 48 7:15 - 14:30 7.25 **MAINT** 44 Ρ CSG PRESS 0 PSI, PRESS TEST TO 1,600 PSI Α FELL TO 1,500 PSI IN 2 MINUTES, DRLG CMT FROM 5,710' TO 5,903' CLEAN OUT TO CBP 5,920', DISPLACE HOLE W/TMAC, PRESS TEST TO 1,800 PSI, 1 MINUTE DOWN TO 900 PSI, 2 MINUTES 500 PSI, 3 MINUTES 250 PSI, 4 MINUTES 100 PSI, CALLED ENGINEER FOR ORDERS NEED TO RESQUEEZE BTM 3 ZONES. 14:30 - 16:00 1.50 **MAINT** 51 Р MIRU PRO PETRO RESQUEEZE 3 BTM ZONES FROM 5,590' TO 5,900' INJECTION RATE 1/2 BPM @ 1,800 PSI RESQUEEZE W/30 SKS NEAT CLASS G CMT, PUMPED 2.6 BBLS FRESH WTR, 30SKS 6.1 BBLS CMT, DISPLACED W/ 1 BBL FRESH WTR & 19.5 BBLS TAMC, POOH 7 STDS, REVERSE CIRC 30 BBLS, SQUEEZE CMT PUMPED 3/4 BBL PRESS UP TO 2,000 PSI, WAIT 5 MINUTES LOST 70 PSI PUMPED BACK UP TO 2,000 PSI, SWI, SDFN. 11/2/2010 7:00 - 7:15 0.25 **MAINT** 48 Р HSM, DRLG W/ N2 UNIT, NOISE WHEN BLEEDING OFF. 7:15 - 8:30 1.25 **MAINT** CSG PRESS 300 PSI LOST 1,700 PSI OVER NIGHT. 44 Α PRESS TEST UPPER PERFS TO 1,600 PSI FOR 10 MINUTES HELD OKAY, RU POWER SWIVEL TAG CMT @ 5,545' DRLG CMT FROM 5,545' TO 5,615' BIT NOT DRLG VERY WELL POOH FOR NEW BIT.

#### **US ROCKIES REGION Operation Summary Report** Spud Date: 9/18/2007 Well: NBU 1022-5M-4T Site: NBU 1022-5M-4T Project: UTAH-UINTAH Rig Name No: GWS 1/1 **Event: WELL WORK EXPENSE** Start Date: 10/19/2010 End Date: 11/8/2010 Active Datum: RKB @5,190.99ft (above Mean Sea Leve UWI: NBU 1022-5M-4T P/U Date Phase Code Time Duration Sub MD From Operation Start-End Code (hr) (ft) 8:30 P - 12:00 3.50 **MAINT** 31 POOH FOR NEW BIT. 12:00 - 17:00 5.00 **MAINT** 44 Α Ρ DRLG CMT FROM 5,615' TO 5,910', CIRC HOLE CLEAN, PRESS TEST FAILED STARTED @ 1,500 PSI, AFTER1 MINUTE 550 PSI, 2 MIN 200 PSI, 3 MIN 100 PSI, 4 MIN ON VACUMN, CALLED ENGINEER FOR ORDERS, SWI, SDFN. 11/3/2010 7:00 - 7:15 0.25 **MAINT** 48 Ρ HSM, SLIPS, TRIPS & FALLS. 7:15 - 15:00 7.75 Ρ **MAINT** 51 CSG PRESS ON VACUMN, MIRU HALIBURTON TO Α RESQUEEZE 3 BTM ZONES, INJECTION RATE .8 BPM @ 1,350 PSI, PUMPED 5 BBLS FRESH, 45 SKS CMT HALCEM (TM) W/ 0.2% HR-601/50 # BAG, DISPLACE W/ 1 BBL FRESH & 18.5 BBLS TMAC POOH 11 STDS EOT @ 5,200' REVERSE CIRC 30 BBLS, START SQUEEZING CMT @ .2-3 BPM @ 1.1 BBLS PUMPED AWAY PRESS UP TO 3,000 PSI WAIT 15 MIN PRESS DROPPED FROM 2,990 PSI TO 2,816 PSI, PUMPED UP TO 3,090 PSI WAITED 20 MIN DROPPED TO 2,975 PSI, TOTAL PUMPED IN SQUEEZE 1.2 BBLS, SWI W/ 2,900 PSI, RDMO HALIBURTON, WAIT ON CMT, SDFN. 11/4/2010 7:00 - 7:15 0.25 Ρ HSM, SLIPS, TRIPS & FALLS, WHIP CHECKS ON **MAINT** 48 HOSES. 7:15 - 15:00 7.75 **MAINT** 44 Ρ CSG PRESS 1,900 PSI DROPPED 1.00 PSI OVER NIGHT, RIH TAG CMT @ 5,400', RU POWER SWIVEL, DRLG CMT FROM 5,400' TO 5,553' CMT SOFT, TALKED TO ENGINEER DECIDED TO WAIT ON CMT ANOTHER 24 HRS, SWI, SDFN. 11/5/2010 7:00 - 7:15 0.25 **MAINT** Р HSM, SLIPS, TRIPS & FALLS, MOVING PARTS. 7:15 - 17:00 Р 9.75 **MAINT** 44 CSG PRESS 0 PSI, DRLG CMT FROM 5,553' TO 5.620', PRESS TEST PERFS @ 5.590'-5.600' FOR 10 MIN @ 1,500 PSI HELD OKAY, DRLG CMT FROM 5,620' TO 5,878', PRESS TEST PERFS @ 5,846'-5,850' FOR 10 MIN @ 1,500 PSI HELD OKAY, DRLG FROM 5,878' TO 5,910', PRESS TEST PERFS @ 5,894'-5,900' FOR 10 MIN @ 1,500 PSI HELD OKAY, DRILL CBP @ 5,920', RIH TAG FILL @ 8,709' L/D 1 JT, BTM PERF @ 8,762' TALKED TO ENGINEER NO C/O TO PBTD, SWI, SDFWE. 7:00 - 7:15 11/8/2010 0.25 MAINT 48 Р HSM, SLIPS, TRIPS & FALLS, PINCH POINTS. 7:15 - 16:00 8.75 **MAINT** 31 Р CSG PRESS 600 PSI BLEED WELL DOWN & KILL WELL W/ 10 BBLS DOWN TBG PLUGGED, POOH "WET" L/D 29 JTS OF TBG, REMOVE BIT P/U NOTCHED COLLAR RIH & LAND TBG @ 7,772.03' W/ 247 JTS J-55 2 3/8" TBG, RD FLOOR & TBG EQUIP, ND BOPS, NU WH, RD TO ROAD RIG TO NBU 464, SWI CALLED CDC TALKED TO BECKY, SDFN. KB= 14' 4 1/16" HANGER= .83" 247 JTS 2 3/8" J-55 TBG= 7,756.89' 1.875" NOTCHED COLLAR= 1.05' EOT @ 7,772.03'

WATER TO RECOVER 30 BBLS